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THE
FARMER & GARDENER,

CONTAINING

ORIGINAL ESSAYS AND COMMUNICATIONS,

ON

AGRICULTURE, HORTICULTURE,

RURAL AND DOMESTIC ECONOMY, &c.

VOL. V.

Baltimore:

PUBLISHED BY E. P. ROBERTS, AND S. SANDS.

1838-1839.



THE

FARMER & GARDENER.

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ON



RURAL AND DOMESTIC ECONOMY, &c.

VOL. I.

PUBLISHED BY E. T. BOWEN, AND S. BAKER.

1831

CONTENTS OF VOL. V.

A.

AGRICULTURE, 59; report on, 242; interests of, 329.
 AGRICULTURAL, Massachusetts Society report, 3; premiums, 17; pursuits, 101; celebration, 128; survey of Massachusetts, 145; fair, 194, 209, 394; exhibition, 209, 226; show at Berkshire, 204; improvement, 275; papers, 298.
 ALLEGHANY MARBLE, 59.
 AMERICAN INSTITUTE, 94.
 APPLE TREES, 106; preservation of, 150; value of, 298; for hogs, 347.
 AUGUST, hints for, 118.
 APRIL, work for, 386.
 ASHES, letters on, N. 2, 12.

B.

BEETS, SUGAR, 9, 25, 35, 41, 157, 158, 182, 196, 213, 247, 282, N. 21; to spade, 73.
 BEET SUGAR, manufacture of, 21, 35, 131, 159, 303, 304, 317, 412.
 BEES, feeding, 14; swarming of, 26; not to kill, 47; to take hives of, 114; glass globe filled by, 151; to manage, 261, 355; to multiply, N. 20.
 BOUNTY ON WHEAT, of Maine, 23.
 BANKING & DITCHING MACHINE, 22.
 BLUE GRASS, 38, 68.
 BEAVER, 50, 119.
 BERKSHIRE PIGS, 57, 217.
 BLIGHT IN PEAR TREES, 58, 85, 106.
 BONES FOR MANURE, 59.
 BUTTER, to make, 71, 84, 92, 300; pickle for, 131.
 BUCKWHEAT, 81, 105, 114.
 BRIARS, to destroy, 81, N. 3.
 BLACK WORM, to destroy, 111.
 BRUSSA MULBERRY, 111.
 BLACK BIRD, no depredator, 135.
 BUGS, to prevent destruction by, 206.
 BANANA, 233.
 BEANS, to cure, 283.
 BEEVES, large, 339.
 BARBERRY BUSHES, causes of blight in grain, 383.
 BOILER, Barnum's patent, 385.
 BROOM CORN, crop of, 388.
 BRUSSELS SPROUTS, 412.

C.

CLAY, 2, 97, N. 26; soil to improve, 402.
 CLOVER AND TILLAGE, 133.
 CLOVER SEED, 9, 17, 126, N. 9; Russian, 59.
 CORN, to get in early, 9; large crop of, 19; stubble to prepare, 50; to weed, 81; Dutton, 81, 130, 161; Baden, 122, 161, 204, 207, 293, 325, 349; to Harvest, 123, 163; crop of, 131, 350, 357; Mercer, 161; seed to select, 183; Chinese, 196, 197; to cut off, 204; different kinds of, 236, 404; California, 250; planter, 255; brooms, 260; account of a field of, 403; to cultivate for fodder, N. 4.

CHRYSLIS, in cocoons to kill, 97.
 CHARCOAL, for onions, 98;
 CHURN, 110.
 COB MEAL AND MILLS, 125.
 CATTLE, report on, 12; marks of good, 60; stall feeding of, 85; management of young, 302; management of, N. 13.
 COWS, a good one, 59, 210; four good, 91; to clean, 195; remedy for swelled bag in, 252; to feed, 399; vs. horses, N. 14; of cream pot breed, N. 14.
 CUT WORM, 13, 79.
 CARROTS, a crop of, 46; white, 130.
 CURCULIO, to destroy, 150.
 CATERPILLAR, to destroy, 111.
 CALF, great, 59, 100, 393.
 CANADA THISTLE, 22, 110.
 CAULIFLOWER, cultivation of, 345.
 CAMPHOR, use of, in agriculture, 212.
 CIDER, to keep sweet, 172; to make, 205.
 CONSTITUTION of an Agricultural Society, 21.
 COCOONERY, Highfield, 265. Germantown, 396.
 COTTON CROP, of Alabama, 49, 261; culture of, 381; seed, to prepare, 362.
 CHINCH BUG, 84.
 CLIMATE, effect of cultivation on, 94.
 COMPARATIVE Value of Hay, Roots, &c. N. 23.
 CEMENTS, N. 30.
 CHEESE, to make, 206.
 CULTIVATION OF GROUND, 193.
 CROPS, in England, 122.
 CROPS, the, 41, 49, 57, 82, 97, 99, 102, 110, 113, 115, 121, 138, 148, 162, 175, 193, 205, 210, 222, 294.

D.

DAHLIAS, to plant, 1: cultivation of, 22.
 DURHAM CATTLE, 36, 68, 169, 361; sale of, 92, 173, 190; price of, N. 26.
 DEVONSHIRE CATTLE, 166.
 DETERIORATION OF LAND, to prevent, 132.
 DISEASE IN CATTLE, 138, 277.
 DRAUGHT, 146, 153, 163.
 DRAINING, 146.
 DRESS FOR FARMERS, 150.
 DROPSY, cure for, 175.
 DRILL, planting of corn, 342; husbandry, N. 11.
 DICTIONARY OF TERMS, 363.

E.

EXERCISE, 87.
 EXPERIMENTAL FARM, 147.
 ESPEY'S THEORY, 413.

F.

FARMERS, 3; Guide, 217; meetings, 402.
 FARM, reports, N. 18, 23.
 FARMING IN MARYLAND, N. 21.

FALLOWING, 221.
 FILTER, CHEAP, 36.
 FIRE BLIGHT, 36, 70.
 FLOWERS, use of, 31.
 FLOUR, to test, 82.
 FLAX, 102; to spin, 215.
 FORREST TREES, to cultivate, 380.
 FRUIT, cultivation of, 260; profit of, 292.
 FOWLS, to keep lice from, 82.

G.

GAMA GRASS, 209.
 GAP IN CHICKENS, 391.
 GEOLOGIST, State report of, 2.
 GEOLOGICAL SURVEY of Maryland, 29, 33, 44, 53, 62, 69, 77, 86.
 GLANDERS, danger from, 193.
 GRAIN, fly, to destroy, 156; worm, 10, 269, 340; measures, 233; and grass, 413; on sowing small, 133.
 GRASS, to cut, 99; lands to improve, 100; seed to sow, 316, 371; seeds, observation on, 362, Hoppers, 145, 169.
 GRUB WORM, to destroy, 71, 100, N. 26; description of, 389.
 GYPSUM, value of, 99.
 GRAPE, Norton's seedling, 202, 217, 222; native, 205; to preserve, 212; to prevent mildew in, 412.
 GRAFTING, 391.

H.

HAMS, to cure, 258.
 HAY, to cure, 82; to salt, 82; to measure, 79.
 HARD PAN SOIL, management of, 19.
 HESSIAN FLY, 303.
 HEIFERS, to breed from young, 291; management of, N. 25.
 HEMP, 102.
 HINTS for the Season, 87.
 HERDS GRASS, 131.
 HORSES, wounds on, 2, 59; scours in, 15; to manage, 32; to prevent diseases in, 89; Bots in, 117, 119, 300, 389; breeding of, 244; broken winded, 314; quarter cracks in, 402, to feed, 341.
 HOOF AIL, 15, 37, 64.
 HOE, new, 270; to sharpen, 119.
 HOGS, madness in, 21; to bleed, 110; mange in, 111; management of diseases in, 123; large, 196; boiled food for, 197; Berkshire, 264; to fatten, 258; food for, 395; report on, 277.
 HORTICULTURAL SOCIETY, Columbian, 42, 50, 66, 93; of Maryland, 79.
 HYDROPHOBIA, cure for, 33, 245.
 HUMIN OR GEINE, 243.
 HUSBANDMEN IN CHINA, 51.
 HUSBANDRY, old and new, 134.

I.

INDUSTRIOUS HABITS, 50.

CONTENTS.

INDIAN MOUNDS, 51.
IMPROVEMENT of Poor Ground, 57, N 28.
IMPLEMENTS, Agricultural, 61.
INSECTS, to prevent ravages of, 71, 79, 93.
IS EVERY THING RIGHT? 99.
INDUSTRY, 103.
INDIAN WHEAT, 118.
IMMIGRATION, 146.
ICE HOUSES, 198.
JULY, hints for, 93.

I.

LAMBS, 285, 395.
LANDS, waste to improve, 293.
LIMING, 17, 210, 237, 268, 283, 349.
LIME, for preserving buildings, 67, 94; mode of analysing, 148; Spreader, 178, 185; theory of its action, 204; for potatoes, 281; burning by Prof. Ducatel, N. 5, 10, 22; Quick, 316; for wheat, 317; oyster shell, 322, 379, 393.
LIGHTENING RODS, 76.
LOCKED JAW, 131.
LOGS, rotten to manure with, 407.

M.

MANGEL WURTZEL, 9, 25, 43, 204, 238, 354, N 2, 25.
MARSH MUD, 98, 246.
MAGOT, 195.
MAY, work for, 1, N 1.
MARCH, work for, 354.
MAXIMS FOR FARMERS, 274.
MARL, 81, 82, 388.
MAPLE SUGAR, 26, 42, 234, 348.
MACHINE, REAPING, 61.
MANURES, 5, 14, 54, 75, 141, 154, 164, 172, 181, 187, 189, 196, 274, 301, 393.
MEADOWS, 82.
MELONS, 14, 25, 27, N 30.
MICHIGAN, encouragement of agriculture by, 321; value of land in, 322.
MIGNIONETTE, cultivation of, 26.
MILLET, 121, 153, 411.
MILK, 55.
MILK SICKNESS, 155, 236, 294, 373.
MORUS MULTICAULIS, 34, 74, 117, 161, 187, 203, 209, 211, 303, 313, 346, 357, 377; great sale of, 222, 294, 342.
MOWING, 75.
MOCKING BIRDS, to feed, 97.

O.

OIL, from vegetables, 10.
OATS, Berkshire crop of, 14; variety of, 60; pasture, N. 18.
ONIONS, 27.
ORANGE FARM, 313.
OVERSEERS, rules for, 109.
OSAGE ORANGE, 206, 270.
OX, intelligence of, 244.
OVERSTOCKING, evil of, N. 3.

P.

PARSNIPS, 67.

PEACH WORM, 100, 231.
PEACH TREES, 106, 163, 175, 394.
PEAR TREES, 394.
PEAS, culture of, 277.
PIGS, large, 33, 297; to prevent mange in, 127; to feed on apples, 298.
PIGGERIES, 291.
PICKLE FOR BUTTER, 131.
PITS for plants in winter, N. 21.
PLOUGHING AND PLOUGHS, 28; late, 235.
PLOUGH and its attributes, 388.
PLASTER ON WHEAT, 316.
POTATOES, 9, 41, 93, 207, 210, 222, 230, 236, 269, 277, 273, 396. Rohan, see R.
POULTRY, 49, 290.
POUDRETTE, 25, 41.
PRUNING, Summer, 44; of fruit trees, 50.
PUDDING, Sweet apple, 300.
PUMPKINS, 9, 25, 187, 214, 269, 396.

R.

RATTLE SNAKE, to cure the bite of, 406.
RATS, to keep from grain, 206.
RADISHES, 110.
REAPING MACHINE, 170.
ROHAN POTATOE, 58, 210, 215, 217, 258, 355.
ROOTS, 3, 25, 103, 275, 346, 348, 370, 401, 409.
ROSE SEEDS, vegetation of, 100.
ROTATION OF CROPS, 147.
RUTA BAGA, 43, 58, 68, 109, 204, 258, 316, 397, N. 2.
RUSSELL COMSTOCK'S DISCOVERY, 369.
RYE GRASS, perennial, 57. To prepare for, 203.
RHEUMATISM, cure for, 302.
RHUBARB, 300.
RIPENING OF GRAIN, 141.
RURAL LIBRARY, 1.

S.

SAP, does it descend, 110.
SALT, for manure, 157.
SCIENCE, advantage of, 174.
SEASON, the, 9.
SEEDS, germination of, 35.
SEED CORN, to steep, 102; to prepare, 125; to economize, 323.
SHEEP, Leicester, 33; in corn fields, 65; to shear 108; food of, 111; worm in, to destroy, 156, 214; Saxon, 223; improved cross of, 323; Stretches, 347, 391; foot rot in, 371; management of, 356.
SHADE TREES, 211.
SINGING, conducive to health, 84.
SILK, importations of, 89, 220; ribbon, 103; handkerchiefs, nature, 65; culture of, &c. 22, 34, 43, 66, 105, 111, 113, 114, 127, 155, 195, 196, 203, 210, 213, 218, 228, 234, 249, 252, 258, 261, 274, 282, 290, 292, 299, 304, 313, 332, 337, 362, 397, 405, 409, N 12. Companies, 65, 119, 345; growers convention, 225, 241, 249, 265, 189, 310; Manual, 241; Machine, Gay's, 313.
SMUT, 172.
SOILS, 76, 119, 278.

SOILING, 349.

SORREL, to destroy, 49.
SORE THROAT, cure for, 303.
SOAP SUDS, 97.
SOUTHERN COM. CONVENTION, N 11.
SPECIE IN FRANCE, 131.
SPRAINS, remedy for, 346.
SPARROWS' POINT FARM, N 17.
SQUASHES, 269.
STOCKING KNITTING, 15.
STRAW, for top dressing clover, 44.
STRAWBERRIES, cultivation of, N 27.
STONE FENCE, to build, 65.
STOCK, litter on, 140; for sale, 162, 197; sales of, 247, 265.
SURRY FARM, 73.
SWEET POTATOES, 412.
SWELLINGS, to cure, 378.
SWALLOWS, use of, 130.

T.

TAP ROOTS, to shorten, 213.
TALIPOT TREE, 190.
TIMOTHY MEADOWS, 73.
TIMOTHY, 131.
TIMBER, 51, 300, N 27.
TOMATOE, 14, 157, 397, 406.
TOBACCO, cultivation of, 118; Trade, 178, 187.
TOWN'S SPELLING BOOK, 281.
TRESPASSES, 33.
TRIP TO FREDERICK, 107.
TURNIPS, 81, 105, 131, 137, 153.

V.

VAN MONS' EXPERIMENTS, 323.
VEGETATION, Philosophy of, 250, 259.
VEGETABLES, culture of, 25, 27, 203.
VINEYARDS & WINE in France, 58.
VOMITTING IN CATTLE, to cure, 302.

W.

WANTS, 46.
WATER FURROWS, to run, 233.
WEATHER, prognostics of, 92, 101.
WEASEL, remedy for, 131.
WET LAND, reclaimed, account of, 132; meadows to improve, 107; leaves for silk worm, 135.
WEIGHT OF CATTLE, to ascertain, 244.
WHEAT CROP, of the west, 2; of 1838, 7; great yield of, 153, 178; seed, to prepare, 47, 342; to choose, 156, 157; culture of, 130, 142, 146, 171, 179; varieties of, 180; to prepare for, 203; black sea, 346; smut in, 398; fly in, N 8; new and extraordinary, 227; manure for, 227; compared with corn, 235; spring, to sow, 2, do. culture of, 4, 340; do. crop of, 89, N. 28; do. report on, 9; do. history of the cultivation of, 10, 18.
WHITE WEED, 110; clover, remarks on, N. 26.
WOOL & WOLLEN Manufacture, 75; grain of interest, 111; yield of, 119.
WORMS IN SEED CORN, 383.

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BALTIMORE: TUESDAY, MAY 1, 1838.

We have received a few numbers of "*the Rural Library, a publication of standard works, (entire, compiled, abridged and original,) on agriculture, gardening and domestic economy.*" It is published by S. Fleet, NY; is gotten up in good taste, and contains, as it imports, besides original matter, interesting transcripts from the best standard works on husbandry; and as we believe it to be well calculated further the good cause, —we most sincerely wish it success. We have copied a chapter from to-day on that most interesting of all subjects, the manuring of land, —and shall, as occasion may suit, continue to draw from its columns such matters as we may believe will be interesting and instructive to our readers.

ALLIANS.

The lovers of the beautiful and popular flowers will bear in mind, that no time is to be lost in planting them; and if they want luxuriant blossoms they must be liberal with their manure. Fermented manure is best; but if that is not attainable, a shove to each root, of a compost made of two parts of manure, one part sand, and one part lime will answer. While growing they must well and often watered; for they are as deep drinkers as heavy feeders.

WEEK FOR MAY.

THE FARM.

It may be said that the month of April, just passed, has been the coldest and most inauspicious one for agricultural purposes that have occurred for many years. In it, instead of those delightful showers—those alternations of sunshine and rain—usually used to refresh the earth—we have had frosts and ice enough for a month of winter. Under such circumstances, it follows as a matter of course, that much of the work usually performed in April has

been transferred to the present month, and hence the necessity for the exercise of increased industry in pushing forward the operations of the farm.

Corn.—As this crop is, after all is said and done, the great stand-by of the farmer and planter, each and all of us should direct our attention, with honest and well directed zeal, to the best means of making it profitable, as there is no doubt that by generous manuring and proper culture, one acre may be made to yield as much as three indifferently manured and slovenly tended.

If your corn-ground is a clover-ley, and was manured and ploughed up last fall, all you have got to do is to thoroughly harrow it, and when your soil is reduced to a state of perfect pulverization, strike out your furrows, and plant your corn. And as soon as it comes up, prepare a compost of 4 parts of ashes and 1 of plaster of paris, and carefully put half a pint on each hill of corn. This will give an early impetus to the growth of the young plants, a thing of the very first importance. When the plants are about 4 inches high, run your harrow lengthwise of the furrows, so as to give a thorough lightening to the soil, and place it in the best possible condition to urge forward the growth of the corn. While this operation is being performed, careful persons should follow the harrows to set up the young plants as they are knocked down. The after culture may be prescribed in a few words—*keep the weeds down, and the earth well stirred and open.* And we would advise, by all means, to substitute the *Cultivator* for the *plough* as much as possible, and after the corn shall have sent its roots into the intervals between the furrows, not to cut them up by deep ploughing, as it is consonant with common sense that every laceration of them, tends to their injury, and is, as we believe, the true cause of the *firing*, which is so generally ascribed to ploughing in dry weather, or to ploughing late in the season. We are clearly of opinion that no stirring of the ground at any period of the growth of the corn, which is unattended with wounding of the roots will have any other than a beneficial effect, as keeping the soil open and free to the action of the atmosphere is the best possible means of attracting therefrom nourishment

for the growing plants, and we would have you bear in mind, that if you wish a good crop you must keep your field clean. In conclusion upon this point we would observe, that the sooner you get in your corn, the better chance it will have of escaping the frosts of autumn.

Potatoes.—Get in your potatoes as early as possible in this month, and while putting them in do not spare your manure. As soon as they begin to show themselves above ground run your harrow cross-wise the furrows, so as to lighten the ground, and give the tender plants a chance of coming up vigorously. When they are three or four inches high put your plough in, taking a furrow from the rows as you go one way, and return it as you come back the other; letting the hoers follow the plough, not for the purpose of making a high hill, but to better pulverize the earth, and to make a *hill* of equal proportions around the plants of moderate height and sufficiently flat to receive the benefits of the rains. After the first working with the plough and hoe, the *Cultivator* is the preferable implement, and two workings with it will be found enough to secure, in ordinary seasons, a good crop.

The potato sets should be cut a few days before they are planted, and will be benefitted by being rolled in plaster or ashes.

Peas and Beans.—Your field peas and beans should be got in speedily, and kept clean until laid by.

Pumpkins.—Whether you intend planting your pumpkins in the corn-field or in a patch by themselves, you should plant them early this month, and as the friend of your milch-cows and hogs let us advise you to plant freely.

Millet.—This best of all substitutes for hay or fodder, should be planted this month and the next.

Clover.—If you have not already sown your clover seed, you may still do so, but be careful to get it in as early as possible, as every week's delay at this season is disadvantageous, and will prove riskful. Sow plaster over your fields.

Fruit Trees.—Take in the proportion of 2 lb. of potash, and dissolve it in two gallons of water. When the potash is dissolved, take a painter's brush, and apply the solution to the trunks

of your fruit trees, avoiding the touching of the buds or leaves. It will destroy insect deposits, prove repulsive to the insects themselves, and exert a beneficial influence on the general health of the trees.

Pastures.---If you can do so conveniently, you will find it to your interest to keep your stock off your pastures until the grass shall have had a chance to start and get ahead.

Lucerne.---This excellent, though neglected grass, may now be sown on well pulverized ground.

Water Melons, Canteleupes, and Musk-melons, may all be got in now.

Spring Wheat.---If you have not yet sown your Spring Wheat, it may still be put in with the certainty of being ready for harvesting early in August.

Sweet Potatoes should be put in early.

Beets, Mangel Wurtzel, Parsnips and Carrots may all be put in this month, the earlier the better. But put in neither unless you manure well, and have come to the resolution of keeping them clean, in good growing condition. If you do them justice they will give you 1000 bushels to the acre, add 50 per cent. to the value of your dairy next winter, preserve your cattle and hogs well through the winter, and be a source of conscious pleasure to you whenever your stock may be exhibited to your neighbors, for who does not indulge in that feeling under such circumstances?

IN THE KITCHEN GARDEN.

Melons of all kinds, *cucumbers, squashes, pumpkins, Irish and sweet potatoes; roasting-ear corn* should all be put in this month as early as possible.

Cabbage. Sow your cabbage seed.

Radishes, lettuce, beans, peas, cauliflowers and indeed most of the various species of vegetables should be put in early this month.

Onions. Clean and thin out your early sown onions.

Beets, Carrots, and Parsnips should be put in as early as possible.

Peppers and Tomatoes should be sown early, and when fit transplanted.

Clay.---As the beneficial effects of clay on light and sandy soils is so generally understood and acknowledged, we are surprised that it is not more extensively used in ameliorating the condition of soils of this nature. A gentleman of this town informs that in many cases he considers clay altogether preferable to manure, from his own experience in the matter. Four or five years since, he had carried on a lot of small extent a considerable quantity of clay, which was spread over the surface to the depth of three or four inches.

This was left until dry, when it was rolled; the lot was then planted with potatoes, which yielded a great crop. The succeeding year the lot was ploughed, and seeded down with hemp; the crop that followed was the heaviest raised in this country this year. In the fall of the same year, the lot was again ploughed and seeded down with wheat, of which it produced an extraordinary crop. This wheat crop brought the highest premium in the commonwealth. The land has been liberally manured, and has since yielded great crops of hay. In this case there has been evidently a great improvement of the soil, and similar treatment of light soils would doubtless be followed by similar effects. If we were a farmer we think we should try it.—*Greenfield Gazette.*

The Wheat Crop, in the West.---The Wabash (Indiana) Courier of late date says:—We have recently conversed with several of our best farmers, and with other gentlemen residing at a distance, and all concur in saying that the wheat crop was never more promising in the Wabash valley. The fields are represented as being remarkably numerous, and their present appearance gives token of an overflowing abundance.

[From the Farmer's Cabinet.]

TREATMENT OF WOUNDS ON HORSES.

Having seen a communication, extracted from the Maine Farmer, requesting information in regard to the treatment of wounds on horses, and having had some experience of the value of the following remedy, I confidently recommend its use. It is a solution of saltpetre and blue stone. The saltpetre should be first dissolved in warm water, in such proportions as to be moderately strong to the taste, and bluestone added until the solution is slightly tinged. This, and nothing else, is to be used as a wash, two or three times a day. It purifies the wound, destroys proud flesh, produces granulations immediately, and heals the worst wounds in a surprisingly short time. I have had horses badly kicked and otherwise hurt, in mid-winter, and mid-summer; their cure was equally rapid, and afterwards no scar was visible. The wound requires no covering—flies will not approach it, and dressing it with a small mop of rags, tied to a stick is very little trouble. Wounds do not require to be sown up under this treatment; at least I never saw any advantage from it, as the stitches uniformly torn out. The skin will approximate as the wound heals.

PENN.

From the Genesee Farmer.

Sow Spring Wheat, if your Winter Wheat is injured by the Frost.

Mr. Tucker—Last Spring I had a piece of late sown wheat, that looked fine when the snow went off; but our spring was unfavorable for such grain, dry, freezing and thawing, and almost destroyed it. I made my calculation to plough it up and sow it to oats; but being averse to ploughing up crops, I concluded to try an experiment, (to me it was an experiment.) I know not but others have tried it before; I sowed about two-thirds of the piece with spring wheat, half a bushel to the acre, then harrowed it lightly, and rolled it down smooth, the remainder of the field was

harrowed and rolled as the above, except one small piece, which was left unmolested. The result on that lot sown with spring wheat, harrowed and rolled was over 25 bushels to the acre; on that harrowed and rolled, about one-third as much: on the small land that was left without doing any thing to it, hardly worth harvesting; it was so thin that it blasted and shrunk. If there should be any of the readers of the Farmer with wheat situated as above described, let them try the experiment, and I will be accountable for the result. My experiment with a man and team one day, put \$100 in my pocket.

A. FORD.

Union District Mich March 11, 1843.

We have had a opportunity of seeing the Report of the State Geologist, for 1837, with which he has kindly furnished some of his friends in this county, and as that part of it which relates to Cecil county cannot be otherwise than valuable and interesting to many of our readers, we purpose giving it a publication in our next paper. The Geologist shows by his report that he deserves the patronage of the State and that he does not receive his salary without earning it. The concluding remarks of the report must have a beneficial effect in dispelling the prejudices which have existed abroad against the healthfulness of the tide-water districts of Maryland. In speaking of this part of our territory, he says:

"Its agricultural resources are inexhaustible; the average of human existence within it equal to that of any other parts of the State; its comforts and advantages superior to and its physical aspect as favorable as could be desired. * * * * * If advantage, then, be taken of these resources, I feel authorized to say, that this portion of our State, not long since reported stricken with pestilence and poverty, will be looked upon as the garden spot of Maryland."

During the last winter our culturists in Sas-safras Neck and Bohemia have hauled out great quantities of *green sand* and *marl*, indicated by the Geologist when he passed this county, and we doubt not the hints in the report as to the quantity to be used to the acre, and the mode of using it, will be of invaluable service. The Geologist says:

"There can be no necessity urging the intelligent farmers of Cecil to the use of these invaluable resources, by means which, together with the other natural advantages of the county, it can be made one of the most flourishing in the State. Its peculiar position, the head of the bay,—intersected by water courses,—traversed both by a canal and rail-road, and possessed of every facility for the transportation of its various productions—midway between two large cities, either of which, for social intercourse, can be reached in a very few hours—presents itself under a very favorable aspect to those who are desirous of retiring upon farms, of adding landed estates. There can be no doubt that the prices at which lands have recently been sold in Cecil are much below their intrinsic value; and without desiring to create a one-sided or an unwholesome spirit of speculation, by fixing a nominal value to them, that would be more injurious than beneficial to the prosperity of the county, they may be safely recommended to those

who are willing to invest their funds in this way; provided they be improved forthwith by means of those natural resources which they contain within themselves, or that are within their reach."

The Geologist does not report the existence of limestone in this county, but says there are indications that bands of it exist at the head of Principio Creek, and in the vicinity of the Rising Sun. We are pleased to learn that he intends returning the early part of of this season to make systematic search for that invaluable rock.—*Cecil. pap.*

[From the Essex (N. H.) Register.]

THE FARMERS.

Among the manual occupations, the agricultural life is most favorable to intellectual cultivation. And this for two reasons: First, there are the long winter evenings, when the farmer having returned from the forest, whence he sleds his fuel for his fire, may sit at that fire and read—read and reflect, with none to molest, or make him afraid! And, in the second place, his occupation itself is so various, and requires so much planning, that it is a constant spur to his ingenuity. It is really an exertion of no small judgment to carry on a farm skilfully. He who can do it, must understand the seasons and the soil; he must understand when it is best to put in the seed as well as the sickle—in a word, he is the lord and governor of a little territory in which he may manifest the wisdom of his plans, and the rectitude of his laws. He must work with his mind as well as with his hands, and the ingenuity of the one will soon be seen, as well as the industry of the other.

There is no employment in which the regard to sagacity and penetration is more immediate. A great writer on political economy declares: "After what is called the fine arts and the liberal professions, there is no trade which requires so great a variety of knowledge and experience." The innumerable volumes which have been written upon it, in all languages, may satisfy us, that among the wisest and most learned nations, it has never been regarded as a matter very easily understood. And from all these volumes, we shall in vain attempt to collect the knowledge of its various complicated operations, which is commonly possessed even by the common farmer."

In another place, he says: "The man who works upon brass and iron, works with instruments, and upon materials, of which the temper is always the same, or very nearly the same. But the man who ploughs the ground with a team of horses or oxen, works with instruments of which the health, temper and strength, are very different upon different occasions. The condition of the materials which he works upon, too, is as variable as that of the instruments which he works with, and both require to be managed with much judgment and discretion." From this, he infers that no class of working men have so much to improve the mind, and to force them upon judgment, as those who till the ground.

To all this we must add, in our country, that the farmer, owning his soil, and most of his estate lying open to taxation, has a great motive to attend strictly to public affairs, to watch the fiscal concerns of the nation, and to see that its expenditures are not lavished upon useless objects. This acquaints him with public matters; it teaches him practically the elements of a republican go-

vernment. He must also see to the titles to his estate; he must be acquainted with the elements of law and justice. Thus his mind is brought into contact with some of the most important operations of social life.

Again: he sees the works of God on a great scale. He sees him inspiring the instinct of the bee; teaching the insect how to weave her web, or to build her cell; now rearing up the little flower, and now raising the oak to toss its branches in the upper sky; clothing the fields with grass, and the vallies with corn; sometimes sending his gentle showers, and sometimes rolling his thunders through the heavens.

He reads nature—not in books—but on her primitive page, in her original language. He is admitted behind her curtain, to be a spectator of her most important operations.

The farmer must have a darkened intellect and a sullen heart, who does not see the wisdom and adore the care and benevolence of an ever operating and all-protecting God—Yet such a man may find a shrine for worship in every grassy mound—a temple beneath every majestic tree.

MASSACHUSETTS AGRICULTURAL SOCIETY REPORTS.

To the Committee on Agricultural Products and Experiments, of Massachusetts Agricultural Society.

Gentlemen:—In entering a claim for the premium offered by the Trustees of the Massachusetts Agricultural Society, for the greatest quantity of Spring Wheat per acre, and in conformity to the rules of said society, I now state that the field on which my crop was grown the present season, was planted the year previous with corn and potatoes, and for that year was not manured heavy—say with about six cords of good manure ploughed in. As a reason for so doing, I will state that this field had obtained two premiums—one for potatoes, one for wheat. I need not add perhaps, that when stocked down to grass with that crop of wheat, the soil was well filled with manure. I therefore deemed it unnecessary, if not injurious, to add more than the above amount of manure in the present process, as I have known wheat land to be manured too highly, causing the straw to be heavy and the kernel light. The last week of last April after the land had been well and deep ploughed, the seed (2 1-2 bushels of the Smyrna or Black Sea Spring Wheat*) was sowed and harrowed in cross the furrows, the roller following; which finished the duty of the husbandman to this field, till harvest, which was completed the first week in August, the grain being cut when the kernel was to the feel like India rubber; two days sun cured it for housing. The crop was threshed in October by horse power, (the machine having been in use a number of years and the teeth much worn; I judged, over a bushel passed through unthreshed and went with the straw, of course not counted in the meas-

*This kind of wheat was imported from Smyrna about seven years since, the largest product on my land was fifty-five bushels and an item (for which a premium was awarded) and has generally done well.

ure) winnowed up clean and carefully measured. The amount was thirty-eight bushels and sixteen quarts of clean wheat.

Yours, respectfully,

PAYSON WILLIAMS.

Fitchburg Nov. 10, 1837.

[From the Buck-eye Plow-Boy.]

CULTIVATION OF ROOTS FOR CATTLE.

As this is the season for preparing the ground for roots, I shall again urge their cultivation upon the farmers, and shall occupy a large space upon the mode of culture. I have stated in a former number, that ten acres to grass and one to roots, would winter as many cattle as twenty acres of hay alone. This statement has been questioned by some, but I am fully satisfied, that that statement was not too high. It is generally conceded that a ton of hay and a ton of roots are equal to two tons of hay. Ten acres of grass will not usually produce more than 20 tons of hay, and cannot be made to produce more than thirty tons; while one acre of ruta бага, sugar beet, or mangel wurzel, can be made to yield thirty, forty, and even fifty tons. On this subject the following communication from Mr. Pugh will be read with interest.

CINCINNATI, Jan. 5, 1838.

Richard Fry, Esq.

Dear Sir: Yours of the 29th November was received, but by press of business an answer has been delayed until now.

I did not commence the cultivation of the beet with the intention to manufacture sugar; but solely to test its qualities as feed for cattle and hogs. And I have not cultivated and used the beet for a sufficient length of time to have made, as yet, many experiments. In the spring of 1836, I planted them for the first time, and then sowed only one-third of an acre of the mangel wurzel; which produced by estimation (after weighing an average cart load) eighteen and a half tons, equal to fifty-five and a half tons per acre, of beets with the tops cut off. This crop I fed out last winter, to those of my milch cows which were rearing calves; and I think a stranger could almost select from the herd those that were thus fed.

Being so much pleased with this small experiment, I enlarged my beet ground last season to three acres, sowing both the mangel wurzel and the sugar beet, and have got in, for the present winter's feeding, a fine crop of both varieties, the product of each kind being about equal. The yield of this season is thought to be as great, if not greater, in proportion, than that of last.

My mode of culture is as follows: I plant on rich alluvial bottom land, which is broken up in the fall to the depth of 8 or 10 inches, in the spring the clods dissolve with the frost, and the ground is left mellow and in fine condition. At this season I manure well and plow deep, then smooth the surface and pulverize the clods by harrowing twice; then lay out my drill furrows two and a half feet apart, with a small shallow plow. I plant my seed by hand, putting in about twice as many as I wish to stand, and covering them with about two and a half inches of fine soil; the time for planting is the last week in April or the first in May. Six or eight days thereafter the young plants make their appearance, accompanied

with a host of weeds, ready to contend with them for the mastery, and this they will obtain unless the husbandman is diligent and industrious, as the beets at this stage of their growth are delicate and tender, and are subject to the depredations of different insects, which destroy many of them. At this time the hand hoe is to be used in the cultivation, as the plants are too easily injured to admit of the use of the plow. If they are now well attended to and kept clean they grow rapidly. After they have attained some size and strength they should be thinned so that they may stand at the distance of eight or ten inches apart. The places of missing plants may be filled by transplanting from those parts where there are too many; this should be done in moist weather. When they have attained sufficient size, the cultivator or plow may be used freely. Their growth at this stage is almost incredible, and all you have to do to secure an abundant crop is to keep down the weeds.

The mangel wurtzel matures earlier than the sugar-beet, and I think will yield as many if not more pounds per acre, and stands throughout the season sound and solid, while the sugar beet is more liable to become hollow and unsound. From my own experience, I would give the former the preference over the latter or any other species of roots for feeding stock.

What is the relative value of beets and corn I am unable at present to say; nor am I prepared to state the expense of cultivation per acre. But I do not hesitate to say that the introduction of the culture of roots generally, and of the beet more particularly, is a desideratum, and of the utmost importance to the agricultural interests of the state. It is particularly important to the small landholder, who can thus increase his means of feeding stock four or five fold more than he could by the production of grain; and at the same time by increasing the quantity of manure he adds constantly to the fertility of the soil, instead of exhausting it, as under the old "modus operandi" of farmers.

I let my beets stand out as late as I can, taking care to avoid the frost; and keep them during the winter in cellars under my cattle barns, constructed so that they can be mutilated in fine mild weather.

Both cattle and hogs eat with avidity the tops of the beet, and they are no doubt very nourishing.

Yours, respectfully,

LOT PUGH.

CULTIVATION OF SPRING WHEAT.

Rev. Henry Colman, Commissioner for an Agricultural Survey of Massachusetts, has prepared in obedience to an order of the Senate, a very able Report on the cultivation of spring wheat. His remarks on the cultivation of wheat in Massachusetts show that several farmers have been very successful in raising this grain, usually obtaining large crops; and there is no doubt that with proper management, good wheat crops may be obtained in all parts of New England. On the selection and preparation of seed the Report is similar to what we have already published. Mr. Colman observes that in sowing broadcast, there should not be less than two bushels to the acre; and that many of the best cultivators recommend two and a half and some three bushels. The best crops in Massachusetts have been from

abundant sowing. Mr. Williams' great crop of 55 bushels to the acre was from three bushels sown. This is a larger quantity than is generally recommended; the largest crops that have come within our observation and of which we have seen notices, have generally been from a less quantity of seed, say from $1\frac{1}{2}$ to 2 bushels to the acre.

We make these remarks for consideration, not with a view of questioning the propriety of sowing a large quantity. As we observed in a previous number, farmers differ much as to the quantity of seed necessary to the acre; some sow twice as much as others. We select from this Report those articles that are most useful at this season; others on harvesting &c. will be published at another time.—*Yankee Farmer.*

SOIL FOR WHEAT. Rich, heavy loams, containing a considerable mixture of clay, are most suitable for wheat. Wheat has been cultivated with tolerable success on sandy siliceous lands; but on lands of this description it cannot be repeated oftener than once in five or six years, and the land ought to have been prepared and enriched by the cultivation of preceding manured crops. Lands strongly calcareous, or abounding in lime, are favorable for wheat, and indeed for all other crops. Wherever clover can be made to grow, there wheat may be cultivated to advantage with proper management.

SITUATION AND ASPECT. The aspect of lands, whether high and airy, or low and confined, is of considerable moment. Various theories have been suggested in regard to the origin of rust and mildew in wheat. The prevalent opinion with the French naturalists at the present day is, that they like smut consist of small parasitical plants, designed to be nourished upon the wheat plant. Whatever may be the fact, the appearance of these diseases bears as near a relation to certain states of the weather at the time the wheat is maturing its seed, as the courses of the tides to the changes of the moon. These diseases usually occur in the damp, hot, streaming, foggy weather of July. In low and confined situations, wheat is much oftener blighted than in situations which are elevated, and where the air circulates freely.

PLOUGHING AND PREPARATION OF THE LAND. If intended to raise wheat on land, for example, that is now in green sward, what should be done? Let the land be turned over with as much care, and the furrow slice be laid as flat as possible; and then thoroughly rolled with a heavy roller, until the field is entirely smooth. The inverted sward must not be disturbed; and in no case brought again to the surface. As to the depth of ploughing, if a subsoil plough, such as is described in my First Report, were used, the more deeply the subsoil could be loosened, without burying the upper stratum or mould, so much the better would be the crop. But as such an instrument is probably not yet in use among us, it is advisable to plough little deeper than the vegetable mould; and let that be thoroughly reduced by harrowing to a fine tilth; and the seed be sowed as soon after ploughing as can be conveniently done. Experience and observation establish as a general rule in farming, to sow as soon as may be after the land has been stirred.

MANURES FOR WHEAT. Land among us can seldom be found too rich for wheat; but the

enriching manures may be applied in too great quantities; or in an improper condition; or at an improper time. The feeding of plants is as imperfectly understood as the feeding of animals. As with animals so with plants, we know that they cannot live without food, and their vigor and fruitfulness depend much upon the quantity and quality of their food. But how it is taken up, and by what means elaborated and distributed, remains as yet, in a great degree, among the deep secrets of nature.

Manures are of two kinds; putrescent, animal, or such as are supposed to furnish directly the food of plants; or active, such as excite either the organs of the plant to receive, or the powers of the earth to prepare, this food to be received, or by themselves educe from the substances, with which they come in contact, the means of sustenance and growth for the vegetables to which they are applied. The former class consists of animal or vegetable substances in a state of putrescence or decay, the latter, of mineral substances capable by their action of rendering these vegetable and animal substances soluble and receivable.

I shall go little into any theory of vegetation or of the operation of manures. Many theories have been framed, but no one so demonstratively established, that none other can be substituted in its place, after farther inquiries shall have made us better acquainted with these mysterious but profoundly interesting operations of nature. Facts established by repeated experiments are mainly to be relied upon. The application of green and unfermented manures has always been prejudicial to wheat crops.—We know that the food of plants cannot be taken up unless it is reduced to extreme fineness or rendered soluble. This is applicable to all plants. If green and unfermented animal or putrescent manure be applied to wheat, it is always advisable to plough it in deeply, so as not to be reached by the roots of the plant until it has undergone some degree of decomposition. If, however, the manure be completely fermented and decomposed, it may then be safely applied, by being spread on the ground and harrowed in. It is desirable, however, in general, that the manure should be applied to the crop which precedes the wheat.

Lime. The presence of lime in some degree in the soil seems essential to the growth of wheat, and in a degree to the perfection of any plant. A very minute portion of lime is always found in the wheat plant. Some portion of lime likewise is found, it is believed, in all soils, excepting those composed entirely of decayed vegetable matter, like peat, or of pure silex or sand. In the most productive soils for wheat, lime is found in the form of a carbonate; and the permanent value of a soil for grain crops may be in a degree determined by the presence of lime. In Europe the analysis of the best soils gives 25 to 30 per cent. of carbonate of lime. We shall soon be favored with the analysis of the soils of our own state from our learned geological surveyor.

Lime is not however the food of plants. It is not a mere stimulus to the plant. The most reasonable theory is, that it causes the dissolution of other substances in the earth; and prepares them to become the food of plants, or to yield that substance, which constitutes their food. As lime itself does not constitute the food of plants, this

explains why lime alone does not enrich a poor soil; and why, where it has been applied in excess and without the addition of other manures, it for a time impoverishes a soil.

A new theory of vegetation has been suggested by some distinguished European philosophers, which professes to approach nearer to a solution of this great mystery than has yet been reached. "A new substance has been discovered in all soils and manures, which is denominated *humin* or *geine*. It has been found likewise in all barks; in saw-dust, starch, and sugar. Humin is a substance not unlike carbon, for which it has hitherto been mistaken. It combines with the salts and forms the humic acid. There is a strong analogy between humin and other nutritive substances, such as gum or fecula. It forms a humate with an alkali, which is very soluble in water. All substances, which contain carbon are dissolved in the water of vegetation through the means of humin; and the dissolved mass is taken up by plants as food. Humin in combination with lime, ammonia or potash also becomes soluble in soils or dung.—Humic acid and carbonic acid gas, mixed with water, according to this discovery, constitute the chief food of plants. Every description of manure is only valuable in proportion as it contains these substances."

Such is the modern theory of vegetation; which is in itself plausible, but which will be farther tested by the lights of chemical science; from which examination the best results to agriculture are to be expected. Lime causes the evolution or extraction of this matter from various substances. Potash leads to similar results, and with more power than lime and bone manure; and night soil and all animal manures are supposed to furnish humin or geine in abundance. In respect to night soil or human excrement, a discovery has been recently made in France, which promises valuable results. The charcoal procured from burning wood, peat, or coal in close vessels has been mixed with it in the form of a fine powder, which operates to disinfect it of all offensive odor; and reduce it to a powder, which is portable and may be easily distributed. I have seen this process perfectly effected in the course of an hour. Manures in a decomposed and fermented state are said to supply this humic acid much more abundantly than in a crude or fresh state. In what precise condition they are applied must be matter of farther inquiry and experiment; and depend somewhat on the mode of their application. If designed to be spread broad-cast and ploughed in, experience seems decidedly in favor of applying them in a green and unfermented state; but it is as well decided that green and unfermented manure should never be brought in immediate contact with the roots of a growing plant.

The rules for the application of lime to the soil are of more immediate importance to the farmers than any further discussion of the theory of their operation.

Limes are found of various qualities from their different measures of combinations with siliceous, argillaceous, or magnesian earth.—Magnesia is found combined with some of our lime-stones in considerable quantities, and when in great amount is deemed prejudicial to vegetation. The quality of our various lime-stones is of great importance; and this will soon be furnished to us by

the highest authority. Lime may be applied to soils for two objects. The first to make a permanent change in the nature of the soil, as for example, to render a clayey soil less adhesive, and make it friable. In this a very abundant application would be required; and at the present prices of lime and of land would be an experiment not likely to be undertaken by many of our farmers.

The second object is to afford immediate aid to vegetation. In this case, if we had means of reducing the limestone to a fine powder without calcination, it might at once be advantageously applied, and with permanent benefit.—This has been done by an intelligent observer in West Stockbridge. He has obtained the ground stone in the form of a fine powder from the mills and shops for sawing and planing marble. The usual form in which lime is to be applied among us is in a calcined state, and with a view to its immediate effects. In order to apply it advantageously, it must be either air-slaked, or slaked with water. It may be slaked with water in the field, and distributed immediately while warm; or mixed with mould, in the proportion of one bushel of lime to five of mould, and spread in that form; in which latter form it is, perhaps, more likely to be equally diffused. It may be mixed with peat earth; but in this case it should be allowed a considerable time for fermentation, in order to render the vegetable matter of peat soluble, and to extract from it the proper food of plants. But it must not be mixed with animal or putrescent manure. Its effects in such case are to destroy the animal matter, and leave only the woody fibre.

The effects of lime, whether applied in a caustic or an effete state, either air slaked or water slaked, are not very different. The heat imparted to the soil by its application when warm would undoubtedly be to a degree beneficial. It should be applied on the surface of the soil, and merely harrowed in. It has a constant tendency to sink into the soil; and its operation is wanted in the vegetable mould, which is at the surface. In regard to the quantities to be applied there are great diversities of practice. In England, upon soils comparatively destitute of calcareous matter, from 100 to 600 bushels have been applied; the last quantity, however, with injury to the land for some time. The English consider that 300 bushels are ordinarily a proper dressing for an acre, and this is applied at once; very much larger quantities have been applied, but the advantages of such copious liming are not always a compensation for the expense.

The French, and the Germans, of late especially, have been highly successful in the application of lime. The practice of the former differs from that of English agriculture; but its advantages have been fully tested. They recommend the application of about twelve bushels per year, annually, for three years in succession, or forty bushels applied at a time once in five years. This is deemed ample. In this case is probably intended twelve bushels of unslaked lime, the bulk of which in the form of a hydrate, or slaked with water, is more than doubled. The plants on an acre will not take up a sixth of this quantity; but much of it is lost by gradually sinking into the soil, or goes to its permanent improvement. The French method rests upon the highest au-

thority of science and actual experiment; and may be commended to our farmers.

To be Continued.

[From the Rural Library.]

OF MANURING OF LAND.

SECT. 1.—The manuring of land is that operation by which is communicated to it the substance from which vegetables can draw a sufficient nourishment.

REMARK.—ZINCK gives us a very ample account of manuring, which we do not think necessary to insert here. We content ourselves with only observing, that he does not at all agree with the theoretical principles of chemistry, when he says, that "the oily particles added to the soil, excite a kind of fermentation with the oily particles previously in the earth, and with the moisture of the air, and that from thence are produced saline, oily, urinous, empyreumatic, inflammable, alkaline, &c. particles, which open the seeds of plants, and enable them to grow." Every one in the least conversant with chemistry, will readily perceive the futility of this reasoning.

SECT. 2.—It appears evidently, from former demonstrations, that vegetables stand in need of a certain homogeneous matter, to make them grow; but if neither the soil nor the salts, can be considered in themselves as the principles for the nourishment of plants, there can be no other analogous substances in the earth, from which vegetables draw their food, than the oily and the watery particles. From hence it follows, that the manuring of land consists chiefly in communicating to it a sufficient quantity of oily and watery particles.

REMARK.—Having before given an account of the nutritive matter furnished by the air, we here speak only of such matter in the soil, as vegetables derive their growth from.

SECT. 3.—The substances in which there is a mixture of oily and watery particles, constitute the best manure; but oil and water, in a fluid state, and in too great quantity, do more hurt than good to plants, and as they cannot penetrate the pores of vegetables, unless they are subtilized and resolved into vapours, the best matters for manure are those which afford attenuated oils, and a water resolved: now it is observed, that oil is attenuated, and water resolved into vapours, in those substances whose interior parts are subjected to motion, or liable to putrefaction; from whence we conclude, that matters of this kind, subject to such internal motions, constitute the best nourishments of vegetables.

SECT. 4.—It is well known, that there are five kinds of oily particles, namely, the *aerial*, the *mineral*, the *vegetable*, the *animal*, and a *mixture of these*. But as the only particles of the mineral kingdom have no affinity with those of vegetables, as appears from an analysis of them, and as we have already treated separately of the *aerial*, we shall here speak only of the *vegetable* and *animal* soils, and their mixtures.

SECT. 5.—These preliminaries, together with what we have said concerning the principles of vegetation, authorise us to draw the following conclusions:

First.—The nearer the matter intended for manure approaches to the nature of vegetable oil, the better it is; therefore, all other things being equal, vegetable manure should be preferred to that

which is mixed, and this last to animal manure alone.

Secondly.—The sooner the oily particles contained in the matter which is to serve for manure, are consumed, the less they can be profitable to the husbandman. But as it appears, from experience, that the vegetable manures are less durable than the mixed, and that the animal is less durable than the vegetable, the mixed should, on this account, be preferred.

Thirdly.—The more oily particles there are in matter, the richer and more durable it must necessarily be. It is for this reason that mixed manure should be preferred to others, and that the *dung of well-fed cattle* is infinitely better than that of lean ones, as observation and experience fully confirm.

Fourthly.—The more the matter which is to serve for manure, is disposed to putrefaction, the more easily it is subtilized and resolved into vapour. On this principle, the *animal manure* should be preferred to that which is composed of the animal and vegetable, and this last to the vegetable manure alone; and hence, also, dung mixed with urine is by far preferable to dung not mixed with urine, independent of the consideration that it acquires, by this mixture, a greater quantity of oily particles.

REMARKS.—The dead bodies of animals should by no means be buried in arable land, on account of very many evils which may arise therefrom. But they consult perfectly well the interest of their land, who have their cattle, especially sheep, upon it during the night, enclosed in what is commonly called folds, or small fields, in order that they may fertilize it by their dung, urine, and perspirable matter: and this method will be still more advantageously practised, if the land is first covered with a layer of short straw, or half-consumed dung, to prevent, in some measure, the evaporation of these manures; and if all these matters are afterwards ploughed in.

SECT. 6.—Dung is a vegetable substance, ground small, as is proved by remains of vegetables found in it, mixed with the saliva, the juices of the stomach, intestines, and the bilious matter of animals. Dung is therefore a mixed body, readily putrefying, containing an unctuous matter, very nearly approaching to the nature of vegetable oils. It communicates a lasting manure, which is obtained with little trouble, and very cheap. It is therefore beyond all doubt, that dung should be ranked amongst the best manures.

REMARK, first.—They seem to be mistaken who ascribe the richness given to land by dung, to a certain *saline* substance, more or less inherent in the dung, as some have said; for if we examine attentively the experiments which these persons have made, particularly those of Eskilson, with leys of different sorts of dung, and with *acid spirits, alkaline salts, &c.*, it will appear, that, far from finding in them *alkaline salts, sulphur*, and nitre, in abundance, as they thought, there was discovered in them only a very little volatile alkaline salt, depending on the putrefaction more or less prolonged, as was demonstrated by themselves afterwards, with an oily principle united with the water by means of that salt; consequently, all the difference in dung depends solely on the quantity of its *unctuous* particles, and their *solubility in water*. The quantity of the unctuous

principle may be known by distillation, and it varies according to the quality of the animals. The more the dung is unctuous, the warmer it is. Hence the dung of fowls, which feed on scarcely any thing but seeds, pigeon-dung for instance, is hotter than that of horses, the dung of horses hotter than that of cows, and so of others.

REMARK, secondly.—Jethro Tull and Duhamel, writing on this principle, adopted very false principles, on the utility of dung; they could not but draw from thence wrong conclusions: but as their theory has been propagated in other writings and particularly those of some modern agriculturists, we will here give it a brief examination.

First.—They say, that “dung operates in the ground only by dividing, as well by its putrefaction as by its interior motion, the clods of the earth, whereby the interior pores of the earth are multiplied in proportion to the increase of its surface; and the more numerous the pores of the earth are, the fitter it is to communicate its nourishment to vegetables. But as the division of the clods of the earth can be still better effected mechanically, by means of the plough, than by dung,” they think they may from thence conclude, “that the common method of enriching land with dung is useless.”

Now it is easy to demonstrate that this reasoning is founded on three false hypothesis. (a) Duhamel supposed that vegetables draw their nourishment from the *earth* only, or from an earthy substance; and he lays down this hypothesis as an axiom. But we have evidently demonstrated, that it is contrary to the whole *mechanism of vegetables*, as well as to experience. (b) He supposes that dung does not contribute to vegetation materially, but instrumentally, in producing, by its putrefaction and interior motion, the division of the particles of the earth: but every one knows that this hypothesis is contrary to experience, not to say further, that one may even fertilize land with dung which is already rotted; and that besides, the motion of the putrefaction being purely internal, does not extend to the external bodies. Another and more modern author says, that dung ought to be considered as a *ferment*, which communicates its motion to the earth; but he should have considered, that matters in fermentation cannot communicate their internal motion to any other matters than such as are composed of particles of the same nature, that is to say, *homogeneous*. Now neither the mixture nor the disposition of the particles in *mineral earth*, renders it fit to receive the motion. (c) He lays down as a fact, that the dividing of the particles of the earth is equivalent to dunging; but both husbandmen and gardeners know the falsity of this hypothesis; besides, we have demonstrated in the foregoing chapter, that a soil too much divided and too light, is not the most profitable, on account of the great evaporation to which it is liable.

Secondly.—He says, that dung communicates a disagreeable taste to plants. He seems then not to have known that the food of plants is converted, during their growth, into an analogous substance; and that putrid salts difficultly penetrate the pores of vegetables. This last truth we confirm by our own experiments; for having watered a *vine* with *putrid urine*, we observed that neither the *grapes* nor the *wine* had contracted any bad taste. Krasius's before-mentioned experiments

prove, also, the same truth. As to the rest, we must remark here, that it would follow from Duhamel's second hypothesis, that the juices of dung enter into vegetables, since these contract their taste, (which, however, is expressly denied in another place which we have just quoted,) and therefore that its use is by no means confined to the dividing of the particles of the earth.

Thirdly.—He alleges, that there are in dung qualities which are poisonous and dangerous to health, because it generally harbours venomous creatures. To refute this prejudice, we answer, that experience proves that poisonous vegetables, planted in dung, lose much of their noxious quality; or at least, that they never become more poisonous. Besides, it is not true, that dung is of a poisonous nature, and that there are always venomous creatures lurking in it.

Fourthly.—He likewise says, that dung is fit only to fill the ground with weeds, especially dandel. Mr. Hull also favors this opinion. We answer, that their growth is owing to the culture of the land more than to the dung that is laid on it. We grant, indeed, that the dung of horses may often produce this effect, because it is pretty common for horses to void whole the seeds or corn which they have swallowed without chewing them: but the husbandman is not ignorant that this inconvenience can be remedied by culture alone. Cow-dung, or the dung of other ruminating animals, makes a very good manure, in which there are none of those seeds.

Fifthly, and lastly.—He maintains that dung attracts worms and insects to seeds or plants. We partly agree with him in this; but as that multitude of worms, which are in the earth, depend in a great measure on the badness of the husbandry, we think this evil may be remedied by a good culture, or by other means.

SECT. 7.—The vegetables generally used for manure, are either in a sound or in a putrified state. Those of the former kind, as for example, the leaves of trees, boughs, twigs, bark of trees, bits of wood, saw-dust, &c. &c. contain, it is true, a substance analogous to that of vegetables; but as they do not rot easily, when spread upon the ground, and besides, contain very little of unctuous and watery parts, they, of course, cannot be of any lasting service: from whence it evidently appears, that dung should be preferred to them, as forming a better manure. They are, however, in a measure, serviceable, in that they absorb the acid of the land; though, if they are used in too great quantity, they communicate to the earth itself a part of the acidity with which they are fraught. Hence arises the opinion of some, who think that the mixture of these vegetables renders land of a sour or acid nature.

SECT. 8.—We rank in the class of *destroyed* vegetables,

1st. The black mould and turf.

2dly. Soot, of which we pointed out the nature and properties in a former number.

3dly. Coal ashes, which many esteem on account of their property of attracting and retaining water, and of absorbing the acidity of the earth. However, they cannot of themselves contribute to the nourishment of plants, since no unctuous nor saline substance can be extracted from them.

SECT. 9. It is difficult to say, precisely, at what time land should be manured, as much depends

on the aspect, soil, and other causes, particularly the various seasons operating differently on different soils; therefore the principal points to be attended to in this respect, are:

1st. That the land be dry, and thereby fit to receive and retain the unctuous parts of the manure.

2dly. That the manure be spread without delay, and dispersed as equally as possible.

3dly. That it should also speedily be mixed with the earth, and buried at a proper depth, in order that the oily and watery particles may not fly off.

The *Autumn* seems therefore the fittest time for this work, when the earth is dry.

REMARK—It is particularly necessary, that the husbandman attend to the mixing the manures with the earth, that its operation may not be impeded or lost; for if laid on the ground, and no pains taken to incorporate it with the soil and preserve it from the exhalations of the winds and sun, it will lose much of its unctuous matter.

REMARK, secondly—That if ploughed under the furrow of the land, its benefits cannot be felt, at least for a considerable time, nor until the same is again ploughed, to mix it with the soil, as the fluids which would otherwise mix themselves with the upper layer, lays buried, and does not reach to the roots of plants, or rather the roots of plants do not reach the manure. It therefore behoves the husbandman to be careful in mixing the manure with the soil, in which he is to deposit his seed, and from which he expects to reap the benefit.

SECT. 10.—Too much dung may prove hurtful,

1st. In a warm and light soil, by giving it a still greater degree of heat, which, in a manner, burns up vegetables.

2dly. In a strong soil, by making the plants shoot up too fast, in which case they seldom ripen well: they produce larger leaves and stronger stems, but smaller seeds.

SECT. 11.—That the manure may be proportioned to the land, it is necessary to observe the following rules:

1st. The wetter, and consequently the colder, land is, the more dung it requires; for its cold nature should be corrected by the heat of the dung.

2dly. A drier soil requires less dung, lest the too great heat should burn the plants.

3dly. Clayey lands, and those which are of a still colder nature, require a dung which is not putrefied; human ordure, the dung of fowls, of sheep, of goats, of hogs, and of horses, are fitter for them than any other dung.

4thly. Mould being generally drier, does not require so great a quantity of dung.

5thly. Sandy land being naturally hot, and superficially covered with a layer, which is still more so, requires a putrefied dung; that which is not putrefied may also suit it, but less should be laid on at a time, and oftener.

REMARK—From what has now been said concerning the nature of lands and of dung, whether more or less hot or cold, it is easy to judge of the quality and quantity fit for each soil. Of all dungs the human is the hottest, and that of cows the coldest; the dung of fowls is hotter than the dung of sheep; this last is hotter than that of horses, and so of others. The dungs most common-

ly used, are those of cows, horses, sheep and hogs.

6thly. As no dung lasts above five or six years, even in the most favorable soils, and after that time produces no sensible effect, it is necessary to renew the dunging of the ground every sixth year at most; but if the soil be sandy, and has been dunged with vegetable substances, that renewal should be made very much sooner and much oftener.

REMARK—The nature of the vegetables that are mixed with the dung, as well of those which yet remain sound, as of those which are destroyed, gives us easily to know what judgment to form of them. This circumstance, in particular, should be carefully attended to, namely, that the mixture of heterogeneous substances, such as lime, ashes, &c. rather lessens the quality of the dung, than renders it better; for they consume the unctuous parts by their corrosive nature.

THE WHEAT CROP OF 1838.

[Extract of a letter to the Editor of the N. Y. Journal of Commerce, dated Ontario county, March 31st, 1838.]

It is now a good while since I addressed you respecting the crops, and as my former predictions proved nearly correct, I will now venture my opinion on the coming wheat crop. Wheat in almost all situations in this section, looks uncommonly well; better, I think than it ever was known at this season of the year, and better than ever I saw it. Indeed, it is more forward than it was at the end of May last year. Therefore, we may calculate on an early and abundant harvest. Early undoubtedly it will be; and I never knew a bad crop of wheat when early. I never knew the rusting dews come before the 12th July, and from all appearance we shall have harvest by that time. I saw you advised importation last fall, although you and others calculated, (about harvest,) an exportation of 10,000,000 dollars worth of breadstuffs. Now, I would advise those engaged in importing, to be cautious how they do it. If we are ever to raise enough and to spare, this will undoubtedly be the season; especially if the prospect is as good in all the wheat growing states as it is in ours. The weather is as fine as we could wish; ploughing proceeding rapidly; farmers, many of them buying additional teams, and seemingly the prospect of one good crop, after two failures, is encouraging them to go on a larger scale this season. Now mind, tell the importers to bring no more grain than they can dispose of before harvest. Depend upon it, if there is a great crop, of which I have little doubt, the farmers will thrash rapidly as soon as the wheat is out.

Your's, &c.

A FARMER.

[This is good news, coming as it does from a source which is not likely to over-rate the favorable appearance of the crops. We did think, last summer and fall, that the writer was a little bit of a croaker; but it turned out that he was pretty nearly right in his predictions. We trust it will prove so in the present instance.—Ed. J. of C.]

DAHLIA ROOTS.

The subscriber can furnish any quantity of DAHLIA ROOTS to the number of one thousand, recommended to

be a choice variety, all of the double kind, and from the well known nursery of Samuel Reeve, Esq'r. near Salem, New Jersey. I can also furnish from the same nursery very superior APPLE TREES for spring planting, if orders are given in soon for them. Peach Trees cannot be furnished from the said nursery before next fall.

J. S. EASTMAN.

TO THE PUBLIC.

Try the New Agricultural Establishment in Grant-street, next door to Dinsmore and Kyle.

Every article warranted to be first rate. The subscribers, grateful for past favors, take this early opportunity of returning their thanks to their customers and the public in general, and beg leave to inform them that they are now provided with a very extensive stock of newly manufactured AGRICULTURAL IMPLEMENTS, suitable to meet the call of Farmers, Gardeners, Merchants, Captains of vessels, and others, viz: 1000 Ploughs, assorted sizes, from \$4 to \$15 each, comprising of the old common Bar Shear, Winand's Self Sharpener; Woods & Freeborn's patent, all sizes, "Davis'," "Sinclair & Moore's" improved Hill Side Ploughs, highly esteemed for turning the furrow down hill, with wrought or cast shears; Wheat Fans, of various sizes and patterns, from \$15 to \$50 each, warranted to separate the garlic from the wheat; Corn Shellers, from \$12 to \$20; Cutting Boxes, from \$7 to \$50 each; Corn and Tobacco Cultivators, large and small; Expanding do., Wheat Cradles, warranted to have fingers of the natural growth, and Grass Seythes, &c. &c.; Castings, of all descriptions and patterns, by the lb. or ton, to suit customers, allowing a liberal discount to merchants buying to sell again—fuala which will be furnished on the most pleasing terms I od every article warranted to be of the best quality, in proportion to the cost price. All orders by mail or otherwise shall be duly attended to with the greatest despatch.

§7-We would particularly call the attention of Country Merchants and others, wishing to purchase agricultural implements to sell again, to the fact, that we will furnish them with articles on better terms than they can be supplied at any other establishment in the city. Our assortment is complete and as varied as that of the most extensive concern in Baltimore.

We have also connected in its operations with the above branch of business a complete assortment of FIELD AND GARDEN SEEDS, kept by Thomas Denny—Also Garden and Farm Tools, of various sorts and of the choicest collection, which will enable our customers to have filled *entire* all orders in the Agricultural and Seed Departments. mh 26 JOHN T. DURDING & Co.

SUPERB DOUBLE DAHLIAS.

ALSO, GARDEN AND FLOWER SEEDS.

The subscriber offers for sale at his establishment the best collection of Double DAHLIAS offered to the public, and will warrant every root true to name and colour, but they are too well known to need any comment in their favor, as most all amateurs in the vicinity have seen them in bloom to their great satisfaction, so those who wish to have roots that are genuine, apply at the right place, and lower than any other in the city as to quality.

Besides he offers a general and good collection of *Garden and Flower SEEDS*, fresh imported, that cannot be raised to perfection in this country; he has selected from Europe, and will dispose of them on reasonable terms, with a general collection of Greenhouse, Herbaceous and hardy plants, also Bulbous Roots. Catalogues can be had at his establishment, corner of Pine and Lexington street, Baltimore, by

JOHN FEAST,

Florist & Seedsman.

ap 24 3t*

CONTENTS OF THIS NUMBER.

Notice of the 'Rural Library,' a new publication—planting out Dahlias—work for May—clay on light and sandy soils—wheat crop in the west—treatment of wounds on horses—advice to sow spring wheat—Maryland State Geologist's views relative to the resources of Cecil county—agricultural life favorable to intellectual improvement—report to the Mass. Ag. So. on the culture of spring wheat—cultivation of roots for cattle—Mr. Colman's report to the Mass. Senate on the cultivation of spring wheat—essay on manuring land—the wheat crop of 1838—advertisements—prices.

BALTIMORE PRODUCE MARKET.

These Prices are carefully collected every Monday

	PER	FROM	TO
BEANS, white field,.....	bushel.	1 25	
CATTLE, on the hoof,.....	100lbs	7 00	8 50
CORN, yellow.....	bushel	75	76
White.....	"	75	76
COTTON, Virginia,.....	pound	10	12
North Carolina,.....	"		
Upland,.....	"	10	12½
Louisiana — Alabama	"		
FEATHERS,.....	pound.	45	50
FLAXSEED,.....	bushel.	1 25	dull.
FLOUR & MEAL—Best wh. wh't fam.	barrel.	9 50	10 50
Do. do. baker's.....	"		
SuperHow. st. from stores	"	7 50	
" wagon price,	"	7 00	
City Mills, super.....	"	7 75	
" extra	"	8 00	
Susquehanna,.....	"	7 50	
Rye,.....	"	4 75	
Kiln-dried Meal, in hhds.	hhd.	19 00	
do. in bbls.	bbl.	4 00	
GRASS SEEDS, wholes. red Clover,	bushel.	8 00	8 50
Kentucky blue	"	2 50	3 00
Timothy (herds of the north)	"	3 00	3 50
Orchard,.....	"	2 50	3 00
Tall meadow Oat,.....	"		3 00
Herds, or red top,.....	"	1 00	1 25
HAY, in bulk,.....	ton.	12 00	15 00
HEMP, country, dew rotted,.....	pound.	6	7
" water rotted,.....	"	7	8
HOES, on the hoof,.....	100lb.	7 00	7 50
Slaughtered,.....	"		
HOPS—first sort,.....	pound.	9	
second,.....	"	7	
refuse,.....	"	5	
LIME,.....	bushel.	32	35
MUSTARD SEED, Domestic, —; blk.	"	3 50	4 00
OATS,.....	"	34	
PEAS, red eye,.....	bushel.		
Black eye,.....	"	75	1 00
Lady,.....	"	1 00	
PLASTER PARIS, in the stone, cargo,	ton.	3 50	3 75
Ground,.....	barrel.	1 50	
PALMA CHRISTA BEAN,.....	bushel.		
RAGS,.....	pound.	3	4
RYE,.....	bushel.	85	90
Susquehanna,.....	"		none
TOBACCO, crop, common,.....	100 lbs	3 00	3 50
" brown and red,....	"	4 00	6 00
" fine red,.....	"	8 00	10 00
" wrappery, suitable	"		
for segars,.....	"	10 00	20 00
" yellow and red,....	"	8 00	10 00
" good yellow,....	"	8 00	12 00
" fine yellow,.....	"	12 00	16 00
Seconds, as in quality, ..	"		
ground leaf, ..	"		
Virginia,.....	"	4 50	9 00
Rappahannock,.....	"		
Kentucky,.....	"	4 00	8 00
WHEAT, white,.....	bushel.	1 65	1 70
Red, best.....	"	1 55	1 60
Maryland inferior	"	1 40	1 50
WHISKEY, 1st pf. in bbls.....	gallon.	33	
" in hhds.....	"	34	
" wagon price,.....	bbls		30
WAGON FREIGHTS, to Pittsburgh, ..	100 lbs	1 50	
To Wheeling, ..	"	1 75	
WOOL, Prime & Saxon Fleeces, ..	pound.	washed, unwashed	
Full Merino,.....	"	40 to 50	20 22
Three fourths Merino,.....	"	35	40 18 20
One half do.....	"	30	35 18 20
Common & one fourth Meri.	"	25	30 18 20
Pulled,.....	"	28	30 18 20

MORUS MULTICAULIS TREES.

The subscriber has from 25,000, to 30,000 Morus Multicaulis trees now growing at his residence, with roots of 1, 2, and 3 years old, which will be ready for sale this fall, and which he will sell on moderate terms.

EDWARD P. ROBERTS.

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,.....	barrel.		
BACON, hams, new, Balt. cured....	pound.	13	13½
Shoulders,.... do.....	"	11	
Middlings,.... do.....	"	11	
Assorted, country,.....	"	10	
BUTTER, printed, in lbs. & half lbs.	"	20	25
Roll,.....	"		
CIDER,.....	barrel.		
CALVES, three to six weeks old....	each.	5 00	6 00
Cows, new milch,.....	"	30 00	40 00
Dry,.....	"	9 00	12 00
CORN MEAL, for family use,.....	100lbs.	1 68	
CHOP RYE,.....	"	1 50	1 62
EGGS,.....	dozen.	12½	
FISH, Shad, No. 1, Susquehanna,	barrel.	6 75	
No. 2,.....	"	6 50	
Herrings, salted, No. 1,.....	"	3 00	
Mackerel, No. 1, ——— No. 2	"	8 75	11 00
No. 3,.....	"	5 75	
Cod, salted,.....	cwt.	3 00	3 25
LARD,.....	pound.	9	10

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

U. S. Bank,.....	par	VIRGINIA.
Branch at Baltimore,.....	do	Farmers Bank of Virgi. 2
Other Branches,.....	do	Bank of Virginia,..... d2
MARYLAND.		Branch at Fredericksburg, 1p
Banks in Baltimore,.....	par	Petersburg,..... 0½
Hagerstown,.....	¾a	Norfolk,..... 2
Frederick,.....	do	Winchester,..... ½ 1
Westminster,.....	do	Lynchburg,..... 2½ 1
Farmers' Bank of Mary'd, do		Danville,..... 2
Do. payable at Easton,.....	do	Bank of Valley, Winch. 3
Salisbury,..... 1 per ct. dis.		Branch at Romney,...
Cumberland,.....	par	Do. Charlestown,
Millington,.....	do	Do. Leesburg,.... 1
DISTRICT.		Wheeling Banks,...
Washington, }		Ohio Banks, generally 6a7
Georgetown, } Banks, 1p.c.		New Jersey Banks gen. 5
Alexandria, }		New York City, par
PENNSYLVANIA.		New York State, ... 1a1½
Philadelphia,.....	par	Massachusetts,..... 3a3½
Chambersburg,.....	½	Connecticut,..... 3a3½
Gettysburg,.....	do	New Hampshire, ... 3a3½
Pittsburg,.....	2½	Maine,..... 3a3½
York,.....	½	Rhode Island, 3a3½
Other Pennsylvania Bks. 2		North Carolina, 5
Delaware [under \$5].... 4		South Carolina, 6a7
Do. [over 5]..... 1½		Georgia,..... do
Michigan Banks,..... 10		New Orleans,..... a108
Canadian do..... 10		

FARMERS' REPOSITORY

OF AGRICULTURAL IMPLEMENTS AND EAST-MAN'S CYLINDRICAL STRAW CUTTERS IMPROVED.

THE Subscriber informs the public that he has secured by letters patent his late and very important improvements on his Cylindrical Straw Cutter, by which improvements they are made more durable and easier kept in order. All the machinery being secured to an iron frame the shrinkage, wear and decay of wood is avoided. The feeding part of his improved machine is upon an entire different principle from the former machine; far more durable, requiring neither skill or care to keep it in order. These machines are so constructed as to make the freight on them less than half what it cost to ship the former or wood machines, an important desideratum to purchasers living at a distance; and I now offer it to the public upon the credit of my establishment as the most perfect machine in existence for the same purpose. They are also adapted to cutting rags for paper making, and for cutting tobacco as manufactured by Tobacconists, &c.

I also keep these machines on hand made as heretofore with my new feeding machinery attached to them; and also a general assortment of Agricultural Implements, as usual. Elliott's Horizontal Wheat Fans, and Fox & Borden's Threshing Machines are both superior articles.

My stock of Ploughs on hand are not equalled in this

city either for quality, quantity, or variety. I have a large assortment of Plough Castings at retail or by the ton, and having an Iron Foundry attached to my establishment can furnish any kind of Plough or Machine Castings on reasonable terms and at a short notice.

All repairs done with punctuality and neatness. On hand, a few Patent Lime Spreaders, Horse Powers, &c. &c. Also just received, a fresh supply of Landreth's superior Garden Seeds. In store, superior Timothy and Orchard Grass Seed and Seed Oats. All implements in the agricultural line will be furnished by the subscriber, as good and on as reasonable terms as can be had in this city, with a liberal deduction to wholesale purchasers. Likewise will receive orders for Fruit Trees from Mr. S. Reeves' Nursery, New Jersey.

JONATHAN S. EASTMAN,

Pratt street, Baltimore,

Feb 20

Between Charles & Hanover sts

ROBERT SINCLAIR, Jr. & CO.

Light street, near Pratt street Wharf,

OFFER FOR SALE, an extensive assortment of AGRICULTURAL and HORTICULTURAL IMPLEMENTS and SEEDS, comprising all that are required to stock the most extensive plantation. Particular attention is directed towards the manufacturing department, where the most competent workmen are employed and durable materials used.

The assortment of PLOUGHS is large and various, among which are the Double mould board, Sub-soil, Self-sharpening, Improved Davis, &c.

WHEAT FANS—Com. Dutch, Crank Shake, and Watkins' Patent.

CORN SHELLERS—For manual and horse power, warranted to shell 2 a 700 bushels of corn per day.

CORN AND COB CRUSHERS—For breaking the cob in suitable size for feeding stock.

CYLINDRICAL STRAW CUTTERS—of these there are several sizes. The late improvements made have rendered them the most perfect and effective Straw Cutters in the country.

THRASHING MACHINES and Horse Powers.

CULTIVATORS, for cultivating Corn, Tobacco, &c.

DRILL and SOWING MACHINES, for drilling vegetable and grass Seeds.

VEGETABLE CUTTERS, for slicing turnips, mangel wurtzel, pumpkins, &c.

HARROWS—Expanding, Com. Square and Diamond shape.

GREEN'S PATENT and common DUTCH STRAW CUTTERS.

Grain Cradles and Grass Sneaths, with warranted Scythes attached, Sickles, Seythe Stones, Grain and Hay Rakes, Hay and Manure Forks, with 2 a 6 prongs, Ox Yokes, Grubbing Hoes, Docking Irons, Ames' Spades and Shovels, cast steel Axes, Bramble Hooks, Hay Knives, Box, Pruning and Sheep Shears, Grass Hooks, Pruning Knives, Children's Spades, and various other Garden Tools.

Merchants wishing to purchase Ploughs and Castings to sell again, will find it to their interest to examine our stock, being the largest and most general assortment in this city, and for sale on liberal terms.

GARDEN & FIELD SEEDS—Just received from Europe, and from the Clairmont Seed Gardens near this city, an extensive assortment of Garden and European Field Seeds, warranted fresh and genuine, viz.

French Sugar Beet Seed, Mangle Wortzel, Ruta Baga, superior Beet and Radish Seeds, early and late Cabbage Seed, 30 kinds early and late Peas, bunch and pole Beans, Hybrid and other Turnip Seeds, Cauliflower and Broccoli; Scotch Kale, Parsnip, Carrot, Cucumber, Lettuce, Onion, Summer and winter Squash, Melons, Leek, Celery, Ockra, Salsafy Cress, superior assortment of Flower Seeds, Herb Seeds, etc. etc.

FIELD SEEDS—English and Italian Ray Grass, Trefoil, Burnet, St. Foin, Lucerne, white and red Clover, green and blue Grass, early Potatoes, Gama Grass Roots, Baden and Mercer Corn, Italian and Tuscany Wheat, Timothy, Herds and Orchard Grass, Millet, etc.

TREES AND PLANTS supplied at the shortest notice from the Clairmont Nurseries, near this city.

Wanted, prime lots Seed, Grain and Grass Seed.

A NEW-FOUNDLAND SLUT.

For sale, a large size New-Foundland Slut, of large size and very handsome. Her color is black. She is thoroughly broken to the gun, and in pup to a bull dog; price \$20. Enquire of the editor of the Farmer and Gardener, Baltimore, Md.

THE FARMER & GARDENER

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, E. P. ROBERTS AND SAMUEL SANDS—EDITED BY E. P. ROBERTS.

No. 2.

BALTIMORE, MD. MAY 8, 1838.

Vol. V.

THIS publication is the *successor* of the late **AMERICAN FARMER**, and is published at the office, at the N. W. corner of Baltimore and North streets, over the Patriot office, at two DOLLARS AND FIFTY CENTS per annum, if paid within one month from the time of subscribing, or \$3 if after that time. All letters to be post paid.

BALTIMORE: TUESDAY, MAY 8, 1838.

THE SEASON.

Thus far the spring has been most unpropitious for carrying on the operations of the field, and we fear that most of the work usually performed in April, has, in consequence, been thrown upon May, so that the labors of the present month will be very onerous upon the husbandman, and especially upon such as may be weak handed. But in the midst of all these difficulties it is pleasant to learn, in almost every direction, that the crops of wheat and rye give promise of handsome yields.

REPORT ON SPRING WHEAT.

We commence in to-day's paper the report made to the Massachusetts legislature by the Rev. Henry Colman, Commissioner of Agricultural surveys of that state, on the history, culture and product of spring wheat, and commend it to the perusal of our patrons as a most interesting document. Proceeding from the pen of its accomplished author, whose practical knowledge and literary attainments so well qualify him for the task, it cannot fail to be as acceptable for its valuable information as for the perspicuity of its style.

CORN—We earnestly recommend to all to get in their corn crops as early as possible, as from the precarious nature of our autumns, it is impossible to make any certain calculation of exemption from frosts. In such a state of incertitude, then, it behoves us to make assurance doubly sure, by committing our grain to the earth at the earliest possible period, as even a single week might jeopard a large portion of the crop.

PUMPKINS—As this is the month when pumpkins should be planted, we trust that every farmer who is regardful of the comfort of his stock will put in a goodly quantity. For early feed for hogs and milch-cows they are excellent, contributing to the condition of the first and to the milk of the last in an eminent degree. As every farmer and plant-

er knows, they can be grown in the corn-field without materially interfering with the product of the corn, or making an extra demand upon the labor of the farm.

POTATOES—The sooner this crop is got in after the month of April, the better, as by early planting they have a double chance of getting a vigorous start at the onset, and of being carried forward so far before the drought of summer comes on as to be beyond its blighting influence.

SUGAR BEETS—MANGEL WURTZEL.

As this month is the latest period that either of these excellent roots can be put in *advantageously*, we most earnestly enjoin it upon our readers to plant an acre or two, confident if they do so, they will double their crops next year. With the same *manure, labor, and culture* given to potatoes, an acre of either will yield 1000 bushels, and surely there is no one but will acknowledge that they are profitable root crops, as any ground that would give 200 bushels of potatoes would yield five times as many bushels of either of those varieties of the beet.

CLOVER SEED—From the greatly increased demand for this indispensable hand-maid of good farming, we think that it may not be amiss to remind farmers, that by letting their after-math go to seed, and curing and getting it out, they may save themselves a very heavy annual tax, to which they are now subjected for clover seed, and as "a penny saved is two-pence gained," the effort to do so is worthy of every consideration, especially in those times of pecuniary embarrassment, when money is so hard to get, and all possible outlays that can be should be avoided.

GENEROUS—We yesterday noticed a small wagon in which a woman and eight or nine children, from the infant of 6 months to the girl of 14 years of age, were seated, surrounded by a few articles of furniture, passing up Market street, drawn by a miserable looking nag, by whose side walked a man and boy clothed in rags, and apparently in a complete state of despondency. At the corner of Calvert street, some gentlemen who were struck with the distressed appearance of the whole party, stopped the man, and learned from him that he was the father of the family, and was on his way from Caroline county, Md. to the state of Indiana, where he hoped to settle and support his wife and

children. To accomplish this journey he had no money, nor any other means of conveyance than the wagon and half-starved horse he was conducting. The singularity of their appearance soon drew a crowd around them, who sympathized with their distresses, and a collection being proposed, a gentleman was appointed to receive contributions, who soon obtained a considerable sum of money from the by-standers. But they did not stop here, for proceeding along Market street from Gay to Howard, they called upon the various store-keepers, and had the satisfaction, at the conclusion of their charitable labors, of placing in the hands of the poor man the sum of \$125, besides a considerable quantity of clothing. The distressed family, who entered the city almost in a state of starvation, were sent on their way rejoicing, and who will no doubt, in their far-off home, bless the kind strangers who relieved them in the hour of need.

[Baltimore Sun.]

[The above was most appropriately designated a "generous" act by the editor of the *Sun*, and while we give every credit to our fellow-citizens who thus humanely came to the relief of a family of fellow-mortals in distress, we cannot help expressing the opinion that if the legislators of our state had heretofore been influenced by motives of patriotism, and imbued with the enlarged views of statesmen, there would be no necessity for such emigrations; for every poor man would, in his family of children, find substantial helps, who instead of being burthens upon him, and of keeping his nose to the grind-stone, would largely contribute to increase his income.

Let us bring the case home. Here is a family of a man, his wife and eight or nine children, literally driven, by his necessities, from our state, in a condition of the most pitiable wretchedness.—This man with the *help* furnished by his family alone, could have attended one million of silk worms, which would, without interfering with his other agricultural labors, have yielded him upwards of 300 lbs. of raw silk, the money value of which would be rising \$1,200. Does not this simple fact clearly illustrate the blindness of that policy, which withholds encouragement from a branch of industry calculated to confer so many blessings upon our community? There can be but one answer to this question.—*Editor Farmer & Gardener.*]

What is the best of all things? Virtue, because without it there is nothing good.

HISTORY OF CULTIVATION OF SPRING WHEAT.

By the Rev. Hy. Colman, Commissioner of Agricultural Surveys of the state of Massachusetts.

Spring Wheat is of unsettled origin. It was brought from the island of Sicily into Great Britain in the year 1773; and was then denominated Siberian wheat. The designation under which it was known in Sicily was *trimezia*, or three months wheat. There are at least fifty different species of spring wheat known in England. They are probably all of them slightly marked varieties of the same original. The grain is generally smaller than that of winter grain; its flour is of a darker color, and abounds more in gluten; and its nutritive qualities compared with winter wheat are as 94 to 95½. In weight it is not usually so heavy as winter wheat, the latter sometimes weighing 75 lbs. to the bushel, the former weighing about 60. The Black Sea wheat, however, a spring wheat, has weighed 65 lbs. to the bushel. In taste it is sweeter, but the bread made from it is neither so white nor light as that from winter wheat. Spring wheat is a most valuable grain, especially for its early maturity. Remaining on the ground so short a time, it escapes many of the perils from frost, insects, and other circumstances to which winter wheat, requiring nearly a year to come to maturity, is exposed. The different kinds of wheat are, like all other plants, modified by circumstances of climate, soil, and cultivation; and winter wheat, by being planted in the spring, from a sort of instinctive tendency in plants to accommodate themselves to their situation, will, after one or more plantings become summer wheat, and ripen the same season in which it is sown. The principal distinctions among wheats are into red and white kinds, and into thin or woolly chaffed, or otherwise bald or bearded. The white and thin skinned are preferred for bread, the flour being more delicate, and commanding a higher price in the market; but the red is more hardy; and the bald is deemed less liable to mildew than the bearded. In respect to diseases there is no kind which has not in some cases escaped disease, when other kinds have suffered; and there is none which has not in its turn suffered when other kinds have escaped. As far as the diseases of wheat and the accidents to which it is liable are extraneous to the plant itself, whether arising from atmospheric influences, from insects, or from parasitical fungi or plants, the seeds of which may have been conveyed from other plants in the neighborhood, all or any of the different kinds of wheat may be alike affected. The diseases of wheat may likewise be hereditary; and, as in animals, they may become aggravated in successive generations when propagated continually from the same stock in the same situation. The same kind of wheat planted year after year on the same farm or vicinity is liable to degenerate, or to become subject to disease; and therefore the best cultivators recommend an occasional change of seed; and care should be taken to obtain that which is healthy. That very extraordinary care in selecting the finest, plumpest, and most healthy product for seed might as in other cases prevent the deterioration of the plant is scarcely to be questioned.

Cultivation in Massachusetts.—Complaints

have been made for years that wheat could not be raised in Massachusetts; but it has continued to be raised to some extent throughout New England. On newly cleared and burnt lands it has always succeeded; and one of the best farmers in New England asserts, that it is ordinarily as successful as other crops, under good cultivation; this farmer's wheat crops, for amount to an acre, have rarely been exceeded in any part of the country. It may be an encouragement to refer to crops which have been raised in Massachusetts.

In 1814, Bezaleel Taft of Worcester county, states, that he had been accustomed to grow spring wheat for fifteen years; and his crops averaged from 12 to 22 bushels. For three years preceding, the town in which he resided produced a thousand bushels per year.

In the same year Jno. Lowell produced 22½ bushels to the acre; Josiah Quincy 15 bushels; P. C. Brooks, 14 bushels. The average yield in the town of Shrewsbury was 12 bushels to the acre. John Jenks, in Salem, obtained more than 44 bushels on two acres; and in West Newbury the amount of wheat sown was 178 bushels—the extent of land 89 acres; the produce 1956 bushels, or nearly 22 bushels to the acre.

In 1815, in Danvers, the yield of wheat was at the rate of 26 bushels to the acre.

George Osgood of Andover, speaks of having raised wheat for the fifteen years preceding, and of his crops having averaged 20 bushels to the acre.

In 1816, Silas Pepoon, of Stockbridge, raised great crops of spring wheat on light soils, and obtained 25 bushels on seven-eighths of an acre—Four bushels sown gave 92 bushels 12 qts. of an excellent grain weighing 64 lbs. to the bushel—Much of the soil of this region is of a limestone formation. The crops of wheat, in the remarkably cold season of 1816, were every where productive.

In 1817, Jacob Rice, of Shrewsbury, produced 36½ bushels on one acre and 4 rods of land—35 bushels to the acre. Accounts were received this year from all parts of the state of large crops of spring wheat, particularly from Berkshire and Worcester counties. In West Newbury, 58 acres of land produced 1325 bushels, or 22 bushels to the acre. Moses Emery, of the same town, raised 33½ bushels to an acre.

In 1819, Wm. Jackson, of Plymouth, says he is as successful in raising wheat as any other crop, and obtains 18 to 25 bushels to the acre; and that any land which is suitable for upland mowing is adapted to this crop. In 1822 he obtained 22 bushels to an acre. In 1823 from 1 acre and 146 rods, 50 bushels.

In 1821, C. Green, of Mansfield, obtained 16 bushels to the acre, weighing 56 lbs. 4 oz. to the bushel.

In 1818, I. Simpkins, in Brewster, Cape Cod, obtained 22 bushels to the acre; sowed 25th April, and reapt 1st of August.

In 1819, Payson Williams, of Fitchburg, from 1 1-8 acre obtained 28 bushels 30 qts. In 1825 this same farmer obtained 37 bushels to the acre, weighing 65 lbs. to the bushel.

In 1830, Tristram and Henry Little, of Newbury, obtained 34½ bushels to the acre.

In 1828 or 9, in Lynn, twenty-five bushels were obtained to the acre.

In 1834, George Dickenson, of Deerfield, obtained 19½ bushels to the acre. William Thurlow, of West Newbury, obtained 30 bushels to the acre. Payson Williams, of Fitchburg, who has so distinguished himself by his productive cultivation, 55 bushels to the acre.

The past year, 1837, F. Knight of West Newbury, obtained 32 bushels to the acre; Joseph P. Leland, of Sherburne, 32 bushels 14 quarts to an acre. Payson Williams, of Fitchburg, 38½ bushels: Eldad Post, of Lenox, 40 bushels.

The above statements show how constantly and successfully spring wheat has been cultivated within the state. They might be much extended.

Selection of Seeds—I have suggested the importance of an occasional change of seed. Without a careful selection of early, well-formed, and healthy plants, all crops have a tendency to degenerate in the same soil. A change of soil appears to produce a change in the habits or constitution of the plant, and impart to it new vigor. Besides this, diseases are propagated and aggravated by the continued cultivation of the same plants on the same land. From well known experiments it is settled that the condition of plants may be kept up and their vigour and productiveness improved by extraordinary care in the selection of seeds; but as this extraordinary care is not likely to be bestowed by the great mass of cultivators, we recommend as the best substitute an occasional change of seed.

The small round black seed of the tares often found in wheat, resembling in size an onion seed, and which are a great pest both to the crop and to the land, cannot be floated off in water, nor separated by any common wire riddle. A farmer in Edgartown, states that he has a sieve made of parchment pierced with small holes, by which these seeds are easily separated; and a farmer in Northampton is stated to have invented a machine by which all these impurities, tares, chess, &c. are effectually removed. This, if true, will prove highly valuable, as the seed cannot be made too clean, as well on account of the growing crop as of the flour. Garlic within my knowledge, does not prevail in New England.

Preceding crops—Good crops of wheat have been obtained after corn, potatoes, and ruta бага. In England wheat crops, or wheat are termed white crops. Wheat, oats, barley, &c. usually follow turnips, and in these cases the manure is applied to the preceding or green crops. Turnips, Swedish turnips, cabbages, and all the Brassica tribes, are great exhausters of the soil; but in G. Britain they are usually eaten on the land by sheep, and the land is enriched by the deposits of the sheep. The best crops of spring wheat with us have been obtained after potatoes highly manured. Fine crops likewise have followed indian corn and broom corn. In such cases, sometimes, the land is simply harrowed, and the wheat put in with a harrow; but this is slovenly cultivation; and, though respectable crops are in this way occasionally obtained, it cannot be recommended.

(To be continued.)

OIL FROM VEGETABLES—A discovery has been made in England, by which oil may be obtained in greater abundance from the seeds of vegetables by applying to them diluted muriatic acid.—*N. Y. Star.*

[From the Yankee Farmer.]

THE GRAIN WORM.

Mr. Cole—If the history of the grain worm or fly is obtained, it will be gathered in detached fragments, as it is probable no one individual has at this time any very extensive knowledge of them. I have taken a great interest in relation to them from the time I first became acquainted with them, and have enquired into their history, as to the place where they were first discovered, the length of time they have been known, whether they have ever been known prior to their present visit, and how extensive a portion of country they have spread over. The information obtained is quite vague and indefinite. I have, however, a few facts that I wish to communicate to you.

A respectable gentleman who has resided in the northerly part of New York for eight years past, states that "the fly committed some depredations about the lakes six years ago last season, and that he had since heard of it in the easterly part of the state of Vermont, and along the St. Lawrence river, and that they still continued to do more or less damage upon the same farms where they were first discovered." The first that they came under my notice was in 1832, in some of the upper towns upon the Connecticut river. In 1833 they made their appearance in Gilead, Bethel, and towns adjacent to the White Mountains. In 1834 they were very destructive in Bethel and Rumford, and made their appearance on farms along the Androscoggin, in Dixfield, Canton and Livermore, and also upon the Saco and Sandy rivers, and have since continued to progress in an easterly direction, but how far I do not know, but they appear to have spread in an easterly and north-easterly direction from 20 to 30 miles in a year, and in 1835, '36 and '37 they have extended, from the best information I can obtain, at about the same rate. I have been informed by a gentleman who has resided in the upper Provinces of the Canadas, that they are very destructive to their crops, so much so that the Catholic inhabitants have besought the priests to interpose their petitions in behalf of their crops.

I suppose the fly to be a native of this country, and has existed about the great lakes by depositing its eggs in some kind of wild grain that may have grown there; and as agriculture has extended in that direction until it has reached them, and they have found in the heads of wheat good receptacles for the deposit of their eggs, and that from the facilities thus afforded for the propagation of their species, they have spread until they have at length assumed their present formidable aspect; or they may be of foreign origin, and brought on to the Canadas in foreign grain.

As relates to the history of the fly, these few facts are all I have learned for a certainty. Its first appearance in the spring or summer, although it may have wintered in the form of a grub, has been that of a fly, about the time the wheat heads make their appearance above the leaves. A person not acquainted with them would suppose there were three kinds of flies which bore some resemblance to each other, but these are the male and female in different states of maturity. The female is larger than the black fly well known to those who visit our forests the last of June. Its belly and exterior parts are of an orange color, its wings nearly the length of a mosquito's, and near-

ly the same color. The male is somewhat smaller (as is the case with all the species of flies) and of a darker color, feeds upon the grain and especially upon rye, if there are any scattering heads among the wheat or near by, and even upon fields at a distance from the wheat field. I have never seen any of their eggs deposited in the ears of rye, but it prefers to feed upon the kernel while it is growing; I have seen a hundred upon the same head. It requires about the same degree of heat and length of time to hatch them from their eggs and bring them to a proper state to deposit their eggs, that it requires for wheat to vegetate and grow to the blossom. The flies commence laying their eggs a short time before the blossoms appear, and the last season were actively engaged depositing them from ten to twelve days. The egg when first deposited is so small as scarcely to be discovered without the aid of a magnifying glass; it is a little elliptical and nearly of an orange color. It soon increases in length and shows some signs of life, and when disturbed its motions are oscillatory. It is then to all appearance, a smooth grub about $\frac{3}{16}$ ths of an inch in length. I have seen them upon the top of full grown kernels, but they are usually by the side of them, and often several with the same kernel. They either suck the nourishment from the kernel or are poison to it. I have never discovered the least incision in the kernel. It curves where they lie against it, and does not fill. If the grain stands till fully ripe and the heads turn down, many of them drop out. After the grain is fully ripe, their ravages are over for the season, and after the grain is harvested, no farther injury is sustained, except that the kernels that are partially filled shrink more in proportion than the full grown kernels.

After threshing my grain which was last of October, I took a table spoonful of the grubs and mixed them with soil from the wheat field, and kept them there two months; a part of them have been exposed to the weather the whole time since. Upon examination they do not appear to have undergone any alteration. The other part of them were moistened and placed upon the roof of a building, spread thin in a pan, through one of our early cold nights and frozen. Then I mixed some wheat with the soil and kept them in the best situation to vegetate the wheat. The grain came forward and grew finely. The grubs were also doing well, when by an accident farther observations were suspended. Some of the grubs were one-fourth of an inch in length. Their external covering seemed partially transparent—there was a dark speck near one end of them, and if I was not deceived, some appearance of wings, inside the covering. These results are very different from my expectations. Two years since I harvested my grain very damp, and it heated in the mow. I thrashed two bushels and winnowed it in the wind, and after it had lain in the pile an hour perhaps, the top of the pile was alive with worms or caterpillars about three-eighths of an inch long, with a row of bristles sticking up along their backs from their sides. These I supposed to be weevils, as the grubs are called. I now am satisfied that their metamorphosis is from the grub to a fly. One point is certain, that they retain the form of a grub through the winter and two months in the spring. I do not know that the fly deposits any eggs after dark, but from my observation, the most

active time with them is between sunset and dark, and in cloudy weather.

To destroy this insect, or prevent its ravages is truly of almost vital importance. The application of lime is doubtless of great utility if applied at a suitable time, notwithstanding its general failure the last season. Some have supposed that as the grub is an animal substance, the alkali destroys it, but this is a mistake. The lime does not reach the grub, nor does the moisture which may be on the grain, after having become alkaline. If the heads of wheat are white with lime, it does not prevent the fly from depositing its eggs or destroy the eggs after they are deposited; and indeed it is impossible to destroy the grubs after deposited, without destroying the grain with them. The beneficial results from sowing lime are in consequence of the particles of lime which fall upon the wings of the flies and corrode their thin and extremely delicate texture, and thereby render them useless to the flies, and they fall upon the ground and perish. These being the facts, it is evident that three things are requisite to the beneficial results of sowing lime: 1st, that it be sowed before the flies have deposited their eggs. 2d, that the flies are present upon the grain. 3d, that the air is filled with fine mist that may moisten the wings of the flies. When lime is applied under these circumstances, it may be considered an efficient remedy. But this combination of circumstances seldom occurs; hence, the different effects of its application, and also the diversity of opinions in relation to its application. I would not however discourage its use. Ashes applied under similar circumstances will be beneficial in proportion to its alkaline properties. Early sown grain, unless it is very forward, is most likely to be injured by them. The last season grain sown the last week or ten days of May was not injured by them, while all sown previous to that was more or less injured by them in the vicinity of their ravages. It is certain that their ravages have been greatest on plains and intervals or meadow lands. But I presume the difference results more from the forwardness of the grain than from any other consideration. I think I have heard it stated that this difference resulted from the agitation of the grain by wind. This is a mistaken notion. My grain that was most injured by the flies was in almost as airy a situation as the top of Mt. Blanc, the air being always in motion when it can be perceived upon the hills around. I have heard it recommended to burn the chaff and straw. This would do if the fly does not deposit its eggs anywhere except in wheat, and all of them would be secured with the straw and chaff, and all who grow grain would be influenced to come into the measure. Late ploughing has been recommended. This will effect nothing unless they are all shaken from the grain when it is harvested, and then it would be a doubtful experiment.

I do not know as it is necessary to extend my remarks any farther, but will recommend the following machine as the most practicable method of destroying them and preventing their ravages.

I have noticed that the fly when upon the grain will not move until approached very near, and then when disturbed invariably rises to fly to another head, which induced me to see if they could not be taken in netting. I therefore placed some thin cloth upon some sticks, and passed it over

the grain, brushing lightly as I passed along, and found it to succeed beyond my expectations, and am satisfied the machine here recommended will protect the grain of every farmer by whom it is used.

SPECIFICATION.

1st. Two wheels, 5 feet diameter, made as light as possible, the felloes 2 inches deep, 1 inch thick on the concave, the convex surface reduced nearly to an edge.

2d. An axle-tree of light wood, $16\frac{1}{2}$ feet long, 2 inches square.

3d. Two shives 10 feet long, $1\frac{1}{2}$ inch square diameter, tennoned into the axle tree 4 feet from each wheel, the opposite ends converging nearly or quite together; these are to guide or propel the car.

4th. Three slats, $2\frac{1}{2}$ feet long, pass through the axle tree at right angles with the shives, or perpendicularly and moveable, fastened with a thumb screw or key, one in the centre and one near each wheel.

5th. A rod upon the upper and lower ends of the slats, 15 feet 8 inches long.

6th. Two other rods placed upon the ends of some arms from the centre of the slats, the lower one above the fills, both equidistant from the two first, forming a half circle.

7th. Cover this frame with suitable cloth, so that it shall form something similar to half a bathing cloth when upon the reel with both ends closed.

8th. Place a good brimstone match once in a foot along the axle-tree; light them up, and the machine is ready for operation.

The machine is to be pushed before the operator at a brisk walk. The lower rod should brush the grain about six inches from the tops. As the machine passes over the grain the breadths should lap a little, and it should be used as soon as the fly makes its appearance, between sunset and dark, for several nights in succession, not however till the heads of wheat appear above the leaves. The fill of shives will pass through the cloth, and the upper edge of the cloth ought to pass forward of the lower, and elevated a little by the support of wires. After having passed over the grain in this way, the flies will be found suffocated upon the canvass of the car.

There is a prospect that many of the insects might be destroyed in a very simple manner, and not attended with much expense by placing canvass or boards in the wheat fields, the boards covered with molasses, oil, or any ingredient of a sticky nature that will draw them to it; or indeed, perhaps they may be poisoned in this way. Last season, in the height of the fly time, one of my neighbors oiled his chaise top, which did not immediately dry in. The flies collected upon it by thousands and stuck fast to it, but they were principally of the smaller kind, which I suppose to be males. The chaise stood near a wheat field, and the oil appeared to attract the flies to it in great swarms. I therefore believe that many might be destroyed in this manner, at least I think it is worthy the notice of wheat growers, and therefore have introduced it, that those who may not furnish themselves with a machine may perhaps

lessen their ravages by the introduction of something of this character.

Yours, respectfully,

LEONARD NORCROSS.

Dixfield, (Me.) Feb. 27, 1838.

NEAT CATTLE.

Report by Mr. W. A. S. North, of Schenectady, at the New York Agricultural Convention, on Neat Cattle.

In drawing up the following remarks in pursuance of a resolution of the Society, passed at their last meeting, your committee have had some difficulties to encounter, the greatest of which has been the want of that personal communication with each other, which the importance of the subject demanded, and which has compelled them to put off the drawing up of the Report to the last minute. Of the many subjects relating to rural economy which were submitted to the different committees at that meeting, there is none more immediately interesting to the great body of agriculturists, than the one intrusted to your committee, to wit, the present state and future improvement of Neat Cattle. It is a subject which appears to be less understood, and to have received less attention, than any other, "and is most completely identified with our agricultural prosperity and with the comforts, and the very continuance of life." That this kind of stock constitutes a great proportion of the wealth of the country may be inferred from the fact, that our state alone, according to the census of 1835, contains 1,835,771 cattle. It will hardly be expected that your committee should go into a particular history of all the known breeds of cattle, and of all their peculiar properties. Such a course would do in writing a treatise on cattle, but in the present case would only tend to confuse the mind of the inexperienced breeder. Your committee therefore have thought it advisable to confine themselves to the performance of the duty assigned them, to giving a short general description of the most common kinds of cattle among us, as well those imported as our native stock, noting their good and bad points, and by stating the disadvantages and losses attending a careless and unskillful course of breeding, rearing, and feeding, endeavor to get up a spirit of reformation and improvement among the agricultural population; thereby increasing their wealth, and adding to the subsistence and comfort of all classes of the community; and if, by means of our report and those which shall be read here to-day, the farmers could be induced to employ more capital, and to exert more care and skill in all the various branches of agriculture, and particularly to the one under consideration, it would greatly add to the productiveness of their farms, and their wealth. Many books have been published, detailing the great improvements made and still making in England in neat stock, but they cannot be expected to be in the hands of our farmers, and it will be our aim in this report, in some degree, to make up this deficiency, by endeavoring to show wherein our native stock are deficient, and recommending to them a better and more profitable course of breeding. To begin then with the most numerous and least profitable breed, the native cow. "They are a mixture of every breed, and the intelligent and observing

breeder, sees in them traces of almost all the English varieties, such perhaps as they were before science and attention had improved them, such as might offer to the American breeder the original materials of their most improved and valued stock, but requiring more time and perhaps more talent, skill and attention, than the American farmer would be willing to bestow on the subject, and yet necessary to enable him to arrive at the same result. This mixed breed are not very celebrated for any thing; some of them are good milkers as far as quantity is concerned, but as to quality of the milk and aptitude to fatten, they generally fail. Their calves are of diminutive size, rarely giving more than 20 lbs. per qr. when killed, at four weeks old, and if reared, of slow growth, seldom coming in till the third year, and then requiring two or three years more to give them standing and character, such as it is in the dairy. As to their characteristic marks, they are small, short bodied, thin and coarse haired, steep rumped, slab sided, having little aptitude to fatten, or to lay the fat on the right place.—There is another class of native cow, although distinctly marked, (as the horns are wanting,) yet this want will hardly entitle them to be considered a distinct breed, deserves to be mentioned in the enumeration of the native breed. Descended from the Galloway or Angus cattle, a long while ago, they still retain among all the crosses to which they have been subjected, some of the marks and good points for which their ancestors are still celebrated—that is to say, they are a docile, thrifty, hardy kind of animal, with much the same faults, as to form, of those above described, though perhaps more compact, shorter in the leg, a middling thick hide, and withal easier fattened. They are few in number compared with the horned cattle. There is one other species of the native cow, to which it is only necessary to direct your attention, as they are nearly as much celebrated in the sandy tract of country about Albany and Schenectady as the improved short horns themselves, the one for their beauty and good points, the other for their homeliness and bad points. They are peculiar to the sandy soils of our country, running wild in the woods in the summer, and picking up a miserable subsistence in the barn yard in the winter. They are a long legged, raw boned, narrow hipped, sharp backed, steep rumped, slab sided, coarse haired, worthless race, and exactly answer the description of those kind that came up out of the river of Egypt in the time of Pharaoh—"They are poor, ill-favored and lean fleshed, such as were never seen in all the land of Egypt for badness." It is not likely that any improvement will be made in this kind of animal, the nature of the soil, the habits of growing the coarser kinds of grain, the foddering of straw in the winter, and pasturing in the woods in summer, peculiar to the inhabitants, (they ought not to be called farmers,) of the Pine bush, will for years to come prevent any permanent amelioration of their condition. If at any time, the spirit of improvement should enter into the calculations of these people, they might by judicious crossing, and a plentiful supply of roots and vegetables to their stock for a great part of the year attain to something more respectable in this branch of business. This then appears to be the character, and these the qualifications of our native stock." Notwithstanding

their defects, "most valuable selections might be made from them, and these crossed by bulls of the improved breed, would furnish perhaps the most useful stock for the practical man, who was not prepared to pay the high prices inseparable from imported stock." And it will be advisable to select cows, either from stock feeding in the neighborhood, or from those sorts that are best calculated for the nature and situation of the soil. The grand secret of breeding is to suit the breed to the soil and climate. It is because this has not been attended to, that those breeds which have been invaluable in certain districts, have proved altogether profitless and utterly unworthy of culture in others. Let that breed then which is most profitable and best suited to the farm be ascertained, and having succeeded in this, strive to improve it to the utmost, by selecting and breeding from those which to beauty of form, unite the more essential qualities of possessing kindly skins, of weighing most in the valuable parts, together with a disposition to lay fat on the best points, as well as to fatten in a short period of time. The term "kindly skin" means a soft mellow skin, yet firm to the touch, and is as different from the hard, dry skin of some cattle, as it is from the loose, flabby skin of others. The sense of touch, or the art of judging of the disposition to fatten, has been wrought to such perfection, that any well informed breeder can, on examining lean beasts, tell with tolerable certainty in what parts they will or will not fatten. The improved short horns are in all respects the most profitable species of animal to cross with the native cow in situations where the soil is rich and luxuriant.—They are good milkers, quick feeders, arriving at early maturity, and affording the greatest proportion of good meat to its offal; from the thickness and softness of hair with which this breed is covered, they endure without suffering the severity of our weather; but to the full development of all their properties, and to obtain their most valuable returns they should be well cared for and fed upon a full bite of grass. That this valuable breed of cattle have not been more generally sought for as a cross with our native stock is owing in some degree, to their intrinsic value in comparison with others. It is true the first cost of pure bred animals is high, but when it is considered how extensive is the influence of a bull, and how many improved animals may be yearly obtained by his services, the remuneration is most abundant. A very fine pure breed bull may be obtained for from two to three hundred dollars, and such an animal at three years old, may without injury to himself wait upon fifty cows. In those neighborhoods where such an animal is kept, the half bred yearlings bring from ten to twenty dollars, and in some cases thirty dollars. Our farmers only want to believe this fact to act upon it. But how make them believe it? Why let those gentlemen whose tastes, whose consideration for the farmer, whose love of doing good and whose means are sufficient, purchase such an animal, and allow his neighborhood a discriminative use of his services till conviction followed the evidence thus brought home to them. This has been the practice of your committee, who have allowed the industrious and inquiring farmer the use of their bulls for a few years past, without collecting the amount professedly charged for

their services, and they now generally pay the service fee cheerfully, and the work of improvement is in our sections of the country rapidly going on. Another reason why the improved short horns are not more eagerly sought for by the great mass of farmers, is the idea that they require more food and will not keep so easy as the native cow. Now, if they pay better, and in proportion to the extra feed they require, and no one will deny that they do, this objection falls to the ground. The truth is, that as long as the slovenly style of farming of the present day prevails, as it does in too many districts of the state, this objection will continue to be urged. There is yet very little good farming or systematic rotation of cropping pursued, either by our large or small farmers. The land is taxed to its utmost as long as it will bear an average crop of any thing, and when completely exhausted, it is seeded down with five or six pounds of Timothy and Clover to the acre, and Oats or Buck Wheat, and if, as is generally the case, the griss is light, it is pastured until it recovers again in some measure by the manure dropped upon it, or till it is covered with a heavy growth of moss, which turned under in the right time will, after a fashion, enable it again to undergo the process of cropping. Until this system is abandoned, and more attention paid to keep pasture lands in better tilth, and the growing of root crops for winter fodder for neat stock, it is almost useless to attempt to improve the breed of cattle, or any thing else. Even the aristocratic race of the short horns in such cases would be compelled to knock under, and in process of time, by hard fare and inattention, would get back to the point from which skill and science, and care and attention first rescued them, and gave them their present elevated station among the brute creation. Let it be remembered that a good bite of grass in summer, and generous feeding in winter, is necessary to the full development and profitable culture of the short horns. Where this cannot be had, and the land is light and subject to drought, the beautiful little Devon will best find its value, and though not so good a dairy cow, yet she is the source of the finest working oxen, perhaps in the world. The Devons have also a claim to quick feeding, and a maturity much earlier than any unimproved breed. They are said to be the Aboriginal breed of Great Britain, and are there highly valued, and make most delicate beef when fatted. On lands of the above character, the cross between the Devon bull and the native cow would no doubt succeed admirably. These two varieties, the improved Short Horns and the Devons belong to different soils, and are suited to different purposes, and both are extremely valuable in the situations to which they are adapted. The Galloways are also a breed well fitted, by reason of their hardihood, kindly feeding, and much endurance to the severity of our winters, and the misery of our barn yards. They are a very handsome breed of cattle, straight and broad in the back, round in the barrel, and full in the rib, in which points they will compare with any breed. They lay their fat upon the most valuable parts, and though the feed be short, and the winters long, they will do well and thrive.—The Ayreshire breed are also said to feed kindly and profitably, in districts where others could not be made to thrive at all, uniting to a greater degree than any

other breed, the supposed incompatible properties of yielding a great deal of milk and beef. They are new comers, but bring with them a good report, and if they maintain the same excellent character for the dairy in our warmer climate, which they have gained at home, they may become the favorite stock of the country, though it is more than probable that when transplanted from their moist climate and poor soil to our warmer climate and richer soil, they will lose their superiority as milkers, and begin to accumulate flesh. The Hereford and Holstein breeds are partially known, in this country, and what little is known is not much to their credit. The former is no milker, the latter gives abundance of milk, but it is very poor; they are slow to feed, slow to move, and yet slower in attaining maturity. The Alderney, though ill-shaped, is emphatically a better cow than either of the two last mentioned, always poor herself to enrich the milkpail, and though a great feeder yields very little milk; that milk, however, is of an extraordinary excellent quality, and gives more butter than can be obtained from any other cow. The above enumeration contains the description of all the breeds of cattle that we are familiar with, either personally or by reputation, that have been imported into the country for the purpose of crossing with our native stock. Of them all, your committee are of opinion, that the Improved Short Horns, for the rich and fertile valleys, and the North Devons, for the higher but sweeter feed of the uplands, are the most profitable of all to cross with our native stock. They have been the longest in the country, and experience has proved their worth. The Galloways are probably next in importance, and the day may yet come when the hills of Franklin and Essex, and the whole Northern frontier for which they are admirably calculated, may be covered with them. It only remains to conclude this report, and in the words of a Lincolnshire farmer, we would say to those who are, or would be, engaged in the business of rearing stock of any description—"It should be an invariable rule to breed from small boned, straight backed, healthy, clean, kindly skinned, round bodied, and barrel shaped animals, with clean necks and throats, and little or no dew lap, carefully rejecting all those which may have heavy legs and roach backs, together with much appearance of offal."

W. A. S. NORTH,
Chairman of the Committee on Neat Stock.

Cut Worm.—In some years these larvae are very destructive to the Indian corn, and of all the contrivances for destroying them, which we have seen, that of Parke Shee, of Delaware county, in Pennsylvania, is the most simple and the most expeditious. A pair of old wheels from a cart or wagon, are fitted with several projections like the cogs of a spur wheel in a mill, which are so formed as to impress in the earth a hole four inches deep. The smooth track which the wheel makes on the soft ground, induces the worm in its nocturnal wanderings to follow on till it tumbles into the pit. It cannot climb out, and the hot sun destroys it.—*Farmer.*

A person being asked what was meant by the "realities of life," answered, real estate, real money, and a real good dinner."

TOMATOES.

There is perhaps no vegetable of equal value, so little known and cultivated in this country, although we are happy to observe that it is rapidly coming into notice. There is no vegetable easier produced, none that better rewards the labors of the planter.

It has been in use as an article of luxury, either raw or stewed, in soups or fricasees, for gravy or catsup, for pickles or sweetmeats in the southern part of the European Continent. In France and Italy as well as in many of our eastern cities, the tomatoe or love-apple is highly relished and extensively employed in various culinary preparations. They are esteemed by all, salutary as an article of diet, and I am acquainted with some instances among my acquaintance, and with many others through the medium of different publications, in which the free use of them was followed by rapid and permanent convalescence from disease of the liver. Indeed as a dietetic luxury, its utility is so great and so varied, that few who have once adopted its use, can be prevailed upon to dispense with it.

The tomatoe plant is a native of the tropical parts of our continent, but will flourish in our latitude on a good soil with a very little expense of time and labor. The plant of the larger varieties grows luxuriantly and bears enormous quantities of fruit. It is stated by the Ohio Farmer, that a man near the city of New York received \$1800 for the tomatoes he produced from half an acre, in 1836. They may be produced from the seed in the open air on a warm soil, but in order to have them in season and the fruit fine and matured, the seed should be started in a hot-bed, and transplanted as soon as the weather will admit. If you sow the seed in the open garden, let it be done as early in the spring as may be without endangering the young plant to injury from frost. Sow in rows or plant in hills about 2, 2½ or 3 feet apart, according to the size of the variety, or the fertility of the soil. If they come up too thick thin them out. Three or four stalks are sufficient for each hill. Keep free of weeds and stir the ground occasionally and they will grow with great rapidity. As the plant is of the trailing kind, they will require to be supported on a frame of some kind when the branches become so large as to settle on the ground; in order that the fruit may be more fully exposed to the sun and air. Such exposure will greatly promote the perfection of the fruit. A few hills on a rich soil will supply a small family. From seven hills of the large Red Tomatoe, cultivated last summer on a black muck wheeled into my garden I picked 1½ bushels of fruit.

LIME ON POTATOES.—Our friend says, "I learned on enquiry of a quiet, experimenting and scientific man, that raised potatoes of the best quality, by simply dropping into the hole with the potatoes when he planted them, about half a pint of slacked lime, he never knew the crop to be bad in quality or small in quantity."

I tried lime after this fashion, and had not a few horse laughs from old potatoe planters for so doing.

Well, "Let them laugh that lose, for they who win will laugh." I did win; for where for many years before I had raised potatoes of the very

worst quality, in the old way, with the lime dressing alone, I raised potatoes of the very best kind. My Chenangoes were uniformly dry, sweet and abundant. The results were the same the two past seasons, both on a light, sandy loam, and on a stiff, clayey ground. Lime put into the hill, manured with rock-weed, will, it is believed, counteract the bad effects resulting from this kind of manure. Try it, farmers, believe me this 'experiment' will not rob your pockets; try it. One good potatoe is worth two bad ones for man or beast.—*Portland Farmer.*

ECONOMY OF MANURES.—Parkhurst, an eminent British farmer and agricultural writer, who resided some years near Baltimore, in speaking of our economy in manures, says, that

"The farm yard manure in that country (the United States,) is of little value; for it is ill-managed, the straw weak, and the generality of horned cattle so poor, that their dung is light and worthless."

Now if this charge be true, as there is too much reason to believe it is, let us not scold at the exposure of our fault, but set to work in earnest to remove the reproach, by making our straw stronger, our cattle in better condition, and our manure, consequently, more abundant and valuable.

THE BERKSHIRE CROP OF OATS.

In the New England Farmer of February last, we published from the Berkshire Star, an extraordinary crop of oats on eight acres, averaging 91 bushels to the acre. We soon after received from a correspondent at Hartford some inquiries respecting them, which we promised to answer as soon as we got the necessary information; and for that purpose we wrote immediately to the enterprising farmer, whose answer we subjoin.

[*N. England Farmer.*

Great Barrington, March 15, 1838.

DEAR SIR—In answer to your inquiries, the land that the oats grew upon is a gravelly loam, but very little gravel however. In 1830 I put a small coat of barnyard manure on the land;—ploughed and planted it to corn. The year following I sowed it to oats and stacked it down, and put about 1½ bushels of plaster on the oats to the acre. The 3 years next following, I used it for pasture. The first year of pasturing I used about 1½ bushels of plaster to the acre. In 1836 I ploughed it shallow, dragged it well, and planted it to corn. I had a great growth of corn, but the early frost very nearly destroyed it. In the spring following I split the hills as usual; dragged it well; about ½ of the lot is quack land, (we suppose land infested with quitch grass) that I ploughed three times after harrowing, the rest but once. I sowed my oats, 2½ bushels to the acre, and harrowed the quack part well, six times; the other part four times. I sowed 1½ bushels of plaster to the acre, immediately after the oats were up.—One thing I consider very essential in order to keep land in good heart; when I till I till it well, and when I use for pasturing, I do not overstock my land with cattle or sheep, in order that my land shall have a good coat of grass left on the ground in the fall, so as to keep the land warm through the winter, and serve for manure. The oats weighed 35½ lbs. to the bushel. One thing

I would mention, at every time I ploughed my quack land, I applied the harrow immediately after.

Yours, with respect,

JONAH A. HURLBERT.

FEEDING BEES.

Sometimes bees need feeding even as late as to the first of May, when the weather is cold. By lifting a hive it may be judged by its weight whether it contains any honey of consequence; if very light, bore a hole into the side near the top with a small gimlet, then run in a very small stick or knitting needle; in this manner you can learn whether there is honey enough or not. If there be very little or no honey, the bees should be fed until the weather becomes warmer. We once fed two swarms of bees for several weeks, until the first of May; we then thought that they could collect their food, as the flowers were in bloom, and took no more care of them, but at the close of a week's cold weather, most of the time stormy, we looked to them, and found that they had starved. But few persons consider how much bees are affected by the weather and the state of vegetation. We have weighed hives of bees most every week during the warm season, and every month in the cold season, and from these experiments we have gained much valuable information in managing them. We have had bees gain 12 lbs. per week to the hive in the first of April, and the same hives lost 5 or 6 lbs. in a week, about the 20th of May, when the apple trees were in full bloom. In the first case the weather was very warm and pleasant, and the willow and the red flowering maple (in some places called soft or white maple) were in bloom. In May the weather was so cold that scarcely a bee left the hive. We have known bees to eat up the honey and starve in August, on account of a severe drought, there being but few flowers, and those having but little honey. When it was very dry, a hive would lose as much in a week in August as they would in the same time in winter.

From the Genesee Farmer.

MELONS.

The countries in the world most celebrated for melons, are the plains of Bokkara, composed principally of sand; the Island of Cyprus, similarly constituted; and the Delta of Egypt, composed of the fine sands and sediment brought down and deposited in a course of centuries by the river Nile. Dr. E. D. Clark, in his travels in Egypt and Syria, gives an interesting account of the melon cultivation on the Nile. The bed of this long river contains abundance of sand-banks, subject to changes and shifting, from the annual floods by which they are formed. As the water recedes after the floods, these banks are gradually left dry; and are immediately occupied by the Fellahs, as melon beds. Pigeons' or doves' dung, which birds abound in Egypt, is mixed in proper quantities with this sand, and the products are astonishing. Dr. Clark affirms that when ripe, an extensive bed of these melons perfumes the air to a great distance; and as the vessel in which he sailed from Rosetta to Acre, was freighted with this fruit, the fragrance was almost overpowering.

A gentleman, a few days since, assured us that the finest melons he ever raised or tasted, were

grown on a bank of pure sand thrown from a well at the depth of about twenty feet. Manure was mixed with the sand, and the seeds then planted. Three of the melons weighed above 60 lbs. or more than 20 lbs. each. There is no plant that seems more to delight in a sandy soil than the melon. To arrive at perfection it requires great heat, and this a sandy soil gives to a greater degree than any other. Few good melons are raised in the western part of this state; might not the quantity and the quality be increased by planting in manured sand, as in the above described instances? We think it well worth a trial.

THE SCOURS IN HORSES.

MR. L. TUCKER—Having been a subscriber for your Monthly Farmer since its commencement, and been gratified with the perusal of its pages, I wish you success in your efforts to promote the farming interest of our country. Being more used to the practice of farming than the theory, or the use of the pen, I will only inform you of one experiment, and ask a few questions.—Last fall there were several cases of scours in horses in our place. One of my horses was attacked with it, and had become very weak before it came to my knowledge. I put him on dry hay, and gave him a small mess of carrot tops, cut fine with a knife, and mixed with ground oats and salt, to make it palatable. I was induced to try the above, from the astringent taste of the carrot tops. I gave two messes and saw no more of the scours; but as it was the only case I had, I cannot say the carrot tops cured him, but think it was.

There was something said in a former number of the Farmer, of the artichoke. From the remarks, I thought it different from what we call by that name. We have a root we call artichoke, which I intend to try some experiments with.—It is a great producer, and cattle, sheep and hogs, are very fond of them. The only objection to them is, that they cannot be eradicated when once admitted into the soil. The only use they have been recommended for is pickles. They remain in the ground where they grow, all winter, without being injured by frost.

I tried my hand at roots last season, and had a complete failure by planting when the ground was too wet, followed soon by a severe drought; but I intend to try again. My carrots did the best.

DAVID SWICK.

Ovid, Feb. 26, 1838.

HOOF-AIL.

MR. TUCKER—Having seen in your February No. of the Monthly Farmer, a notice soliciting information in regard to a disease that has made its appearance among cattle, called the Hoof-Ail, or Foul in the Foot,—a disease that I had an opportunity some years since to become acquainted with, and saw many experiments tried, and at last found what, I think, is the cause. We succeeded in curing nearly all that we operated upon, and all that had not gone so far as to have their hoofs crack off, or separate the hoof from the live flesh.

The disease originates from a small pipe that lies under the small hoofs or dew-claws, that can be cut out as easily as the pipe to a ring-bone on a horse, and with equal safety. There should be

some care in cutting, not to cut across the cords, but make the incision up and down, and the upper end as far as the small hoofs, and cut carefully down on each side till you can get the most or all of it out. Put in the wound some rosin and oil as warm as you can without burning, and keep the foot dry.

N. B. The pipe is, if not too much affected, white, and resembles a cord or nerve, and is about the size of a goose-quill, and in all two or three inches in length. It can be known from a cord by hooking into it and raising it up, you will find it not tight but easy to move. Those that have cattle affected with this disease will do well to make the search the first opportunity, and they will readily discover the cause and how they should proceed in the operation.

A SUBSCRIBER.

Cheshire, March 28, 1838.

STOCKING KNITTING.

BY GRANT THORBURN.

Were men in the day of prosperity to look out for adversity; in the hey-day of summer to lay up for winter; were there no drunkards, nor foolish spendthrifts—our world would soon lose the slanderous nick-name of being miserable. Were one-tenth of the money that is spent in buying and tuning piano-fortes laid out in knitting needles, and one-fourth part of the time that is lost in giggling, employed in making stockings, I verily believe the balance of trade would be in our favour, and you would not see so much splendid misery walking up Broadway. I do not think, Mr. Editor, you ever saw a piano in the habitation of the Friends, nor did you ever see any splendid misery there.

But to return to the system of stocking knitting. I verily believe that if all the women in town and in the country were to commence knitting, before seven months the balance of trade would be in our favor. At present it is sadly the reverse: bills on London fifteen per cent. above par. Now, I think the suspension of stocking knitting lies deep at the root of this evil. In the good old times when Washington was President, his lady was not too proud to knit stockings for her general. Then we had only one hosiery store; now we have upwards of two thousand stocking shops. Then the mother and girls knit stockings for all the family; now it is computed that two millions of dollars are sent to Europe every year, to clothe the feet and ankle bones of the New Yorkers alone. This one article is sufficient of itself to kick both the beam and balance of trade in our faces. Then our flour went to Europe by the hundred thousand barrels per annum, now we beg from the hungry Hessians a bushel of wheat or a chaldron of rye. You know Mr. Editor, that whether they are right or wrong, my head or my pen is always ready to defend the weaker sex. I speak not to their blame; it is that greatest of all tyrants, *Fashion*, that has driven industry from the door. I wish them to look back on the days of unsophisticated employment; for they are never happy, (those dear sisters) except their feet, their hands, or their tongues, are in motion. Neither would we see so many grey-headed spinsters wearing foreign hair; for those cold-hearted bachelors who reckon every thing

by dollars and cents, would find it more profitable to take to themselves wives who would mend their stockings, patch their coats, and put the apple in the heart of a dumpling, than to live in a state of single unhappiness.

THE AMERICAN FARMER.

The proprietors of this paper have a few complete sets of this work on hand, which they will dispose of at the reduced price of \$50 a set.—They are half bound and comprise each 15 volumes. The American Farmer, it will be recollected, was the pioneer in agricultural improvement in this country, being established in 1819, by John S. Skinner, Esq., to whose talents and industry its pages are indebted for, perhaps, the most valuable collection of agricultural matter to be found in any work extant. Those who desire to possess themselves of this valuable work will make early application as the number for sale is very limited.

GROUND PLASTER OF PARIS,

Of superior quality, in bills on hand and for sale by
JONA. ELLICOTT & SONS,
may 8 3t south end of Patterson st.

DAHLIA ROOTS.

The subscriber can furnish any quantity of DAHLIA ROOTS to the number of one thousand, recommended to be a choice variety, all of the double kind, and from the well known nursery of Samuel Reeves, Esq'r. near Salem, New Jersey. I can also furnish from the same nursery very superior APPLE TREES for spring planting, if orders are given in soon for them. Peach Trees cannot be furnished from the said nursery before next fall.
J. S. EASTMAN.

NEW BALTIMORE SEED STORE.

THE Subscriber having located himself in Grant street, near Pratt, three doors in the rear of Dinsmore & Kyle's Grocery Store, takes this early method of informing his friends and the public, that he has commenced the GARDEN AND FIELD SEED BUSINESS, and solicits a portion of public patronage. He has on hand and intends keeping, at all times, a constant and general assortment of the very best FIELD AND GARDEN SEEDS, a part of the latter, being of the last year's importation, and all the growth of 1837.

Also GARDEN AND FARMING TOOLS, of various kinds; a few barrels of ITALIAN Spring WHEAT; BADEN CORN, raised, and carefully selected by Col. Mercer—DUTTON; MANDAN; SIOUX; AND EARLY SUGAR CORN; CLOVER; TIMOTHY, ORCHARD, & HERD'S GRASS SEEDS; BUCKWHEAT; OATS; MILLET, WHITE DUTCH CLOVER; LUCERNE; TREFOIL; SAINFOIN, ENGLISH RYE GRASS, &c. &c.

Farmers, Gardeners, Merchants, Captains of Vessels, and others, are invited to give him a call, as they can be supplied not only with Field and Garden Seeds of all kinds, but also with PLOUGHS; HARROWS; STRAW CUTTERS; CORN SHELLERS; WHEAT FANS, WHEAT CRADLES, &c. &c., together with all other kinds of useful implements of Husbandry, manufactured and kept constantly for sale by John T. Durdin & Co. at their Agricultural Store, also in Grant street. Orders for articles in the above line by mail or otherwise, shall be faithfully and punctually executed.

THOMAS DENNY,

Grant street, 3 doors in the rear of Dinsmore & Kyle's.

CONTENTS OF THIS NUMBER.

The season—notice of Mr. Colman's report on spring wheat—hint to corn-planters—pumpkins—potatoes—sugar beets and mangel-wurtzel—clover seed—generous act and remarks thereon—value of virtue—history of the cultivation of spring wheat—oil from vegetables—some account of the grain worm—report on neat cattle—the cut worm—realities of life—planting tomatoes—lime on potatoes—economy of manures—the Berkshire crop of oats—feeding bees—melons—the scours in horses—hoof-ail—stocking-knitting—advertisements—prices current.

BALTIMORE PRODUCE MARKET.			
These Prices are carefully corrected every Monday			
BEANS, white field,	PER bushel.	FROM 1 25	TO
CATTLE, on the hoof,	100lbs	7 00	8 50
CORN, yellow	bushel	75	76
White	"	75	76
COTTON, Virginia,	pound	16	12
North Carolina,	"		
Upland,	"	10	12½
Louisiana — Alabama	"		
FEATHERS,	pound.	45	50
FLAXSEED,	bushel.	1 25	dull.
FLOUR & MEAL—Best wh. wh't fam.	barrel.	10 00	10 50
Do. do. baker's	"		
SuperHow. st. from stores	"	7 50	
" wagon price,	"	7 25	
City Mills, super	"	7 75	
" extra	"	8 00	
Susquehanna,	"	7 75	
Rye,	"	4 75	
Kiln-dried Meal, in hhd.	hhd.	19 00	
do. in bbls.	bbl.	4 00	
GRASS SEEDS, wholes. red Clover,	bushel.	8 00	8 50
Kentucky blue	"	2 50	3 00
Timothy (herds of the north)	"	3 00	3 50
Orchard,	"	2 50	3 00
Tall meadow Oat,	"		3 00
Herds, or red top,	"	1 00	1 25
HAY, in bulk,	ton.	12 00	15 00
HEMP, country, dew rotted,	pound.	6	7
" water rotted,	"	7	8
HOGS, on the hoof,	100lb.	7 00	7 50
Slaughtered,	"		
HOPS—first sort,	pound.	9	
second,	"	7	
refuse,	"	5	
LIME,	bushel.	32	35
MUSTARD SEED, Domestic, —; blk.	"	3 50	4 00
OATS,	"	34	
PEAS, red eye,	bushel.		
Black eye,	"	75	1 00
Lady,	"	1 00	
PLASTER PARIS, in the stone, cargo,	ton.	3 50	3 75
Ground,	barrel.	1 50	
PALMA CHRISTA BEAN,	bushel.		
RAGS,	pound.	3	4
RYE,	bushel.	85	90
Susquehanna,	"		none
TOBACCO, crop, common,	100lbs	3 00	3 50
" brown and red,	"	4 00	6 00
" fine red,	"	8 00	10 00
" wrappery, suitable	"		
for segars,	"	10 00	20 00
" yellow and red,	"	8 00	10 00
" good yellow,	"	8 00	12 00
" fine yellow,	"	12 00	16 00
Seconds, as in quality,	"		
" ground leaf,	"		
Virginia,	"	4 50	9 00
Rappahannock,	"		
Kentucky,	"	4 00	8 00
WHEAT, white,	bushel.	1 65	1 70
Red, best	"	1 55	1 60
Maryland inferior	"	1 40	1 50
WHISKEY, 1st pf. in bbls. }	gallon.	33	
" in hhd. }	"	34	
" wagon price, }	"		30
WAGON FREIGHTS, to Pittsburgh,	100lbs	1 50	
To Wheeling,	"	1 75	
WOOL, Prime & Saxon Fleeces,	pound.	40 to 50	20 22
Full Merino,	"	35	40 18 20
Three fourths Merino,	"	30	35 18 20
One half do. }	"	25	30 18 20
Common & one fourth Meri. }	"	25	30 18 20
Pulled,	"	28	30 18 20

MORUS MULTICAULIS TREES.

The subscriber has from 25,000, to 30,000 Morus Multicaulis trees now growing at his residence, with roots of 1, 2, and 3 years old, which will be ready for sale this all, and which he will sell on moderate terms

EDWARD P. ROBERTS.

BALTIMORE PROVISION MARKET.			
APPLES,	PER. FROM. TO.		
BACON, hams, new, Balt. cured....	barrel.		
Shoulders, do.....	pound.	13	13½
Middlings, do.....	"	11	—
Assorted, country,	"	11	—
BUTTER, printed, in lbs. & half lbs.	"	10	—
Roll,	"	20	25
CIDER,	barrel.		
CALVES, three to six weeks old....	each.	5 00	6 00
Cows, new milch,	"	30 00	40 00
Dry,	"	9 00	12 00
CORN MEAL, for family use,	100lbs.	1 68	—
CHOP RYE,	"	1 50	1 62½
EGGS,	dozen.	12½	—
FISH, Shad, No. 1, Susquehanna,	barrel.	6 75	—
No. 2,	"	6 50	—
Herrings, salted, No. 1,	"	3 00	—
Mackerel, No. 1, —...—No. 2	"	8 75	11 00
No. 3,	"	5 75	—
Cod, salted,	cwt.	3 00	3 25
LARD,	pound.	9	10

BANK NOTE TABLE.			
Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.			
U. S. Bank,	par		
Branch at Baltimore, do	Farmers Bank of Virgi.	2	
Other Branches, do	Bank of Virginia,	2	
MARYLAND.	Branch at Fredericksburg,	2	
Banks in Baltimore, par	Petersburg,	2	
Hagerstown,	Norfolk,	2	
Frederick,	Winchester,	2	
Westminster, do	Lynchburg,	1	
Farmers' Bank of Mary'd, do	Danville,	2	
Do. payable at Easton, do	Bank of Valley, Winch. ..	2	
Salisbury, 1 per ct. dis.	Branch at Romney, ...	1	
Cumberland, par	Do. Charlestown, par		
Millington, do	Do. Leesburg, do		
DISTRICT.	Wheeling Banks,	2	
Washington, } Banks, ½ p.c.	Ohio Banks, generally 3½a4		
Georgetown, } Banks, ½ p.c.	New Jersey Banks gen. ..	3	
Alexandria, } Banks, ½ p.c.	New York City, par		
PENNSYLVANIA.	New York State, do		
Philadelphia, par	Massachusetts, 3a3½		
Chambersburg, ½	Connecticut, 3a3½		
Gettysburg, do	New Hampshire, 3a3½		
Pittsburg, 2½	Maine, 3a3½		
York, ½	Rhode Island, 3a3½		
Other Pennsylvania Bks. ..	North Carolina, 5		
Delaware [under \$5] 4	South Carolina, 6a7		
Do. [over 5] 1½	Georgia, 8		
Michigan Banks, 10	New Orleans, 8a10		
Canadian do. 10			

TO THE PUBLIC.

Try the New Agricultural Establishment in Grant-street, next door to Dinsmore and Kyle.

Every article warranted to be first rate. The subscribers, grateful for past favors, take this early opportunity of returning their thanks to their customers and the public in general, and beg leave to inform them that they are now provided with a very extensive stock of newly manufactured AGRICULTURAL IMPLEMENTS, suitable to meet the call of Farmers, Gardeners, Merchants, Captains of vessels, and others, viz: 1000 Ploughs, assorted sizes, from \$4 to \$15 each, comprising of the old common Bar Shear, Winand's Self Sharpener; Woods & Freeborn's patent, all sizes, "Davis," "Sinclair & Moore's" improved Hill Side Ploughs, highly esteemed for turning the furrow down hill, with wrought or cast shears; Wheat Fans, of various sizes and patterns, from \$15 to \$50 each, warranted to separate the garlic from the wheat; Corn Shellers, from \$12 to \$20; Cutting Boxes, from \$7 to \$50 each; Corn and Tobacco Cultivators, large and small; Expanding do., Wheat Cradles, warranted to have fingers of the natural growth, and Grass Scythes, &c. &c.; Castings, of all descriptions and patterns, by the lb. or ton, to suit customers, allowing a liberal discount to merchants buying to sell again—fnala which will be furnished on the most pleasing terms I od every article warranted to be of the best quality, in

proportion to the cost price. All orders by mail or otherwise shall be duly attended to with the greatest despatch.

We would particularly call the attention of Country Merchants and others, wishing to purchase agricultural implements to sell again, to the fact, that we will furnish them with articles on better terms than they can be supplied at any other establishment in the city. Our assortment is complete and as varied as that of the most extensive concern in Baltimore.

We have also connected in its operations with the above branch of business a complete assortment of FIELD AND GARDEN SEEDS, kept by Thomas Denny—Also Garden and Farm Tools, of various sorts and of the choicest collection, which will enable our customers to have filled entire all orders in the Agricultural and Seed Departments. mh 26 JOHN T. DURDING & Co.

SUPERB DOUBLE DAHLIAS.

ALSO, GARDEN AND FLOWER SEEDS.

The subscriber offers for sale at his establishment the best collection of Double DAHLIAS offered to the public, and will warrant every root true to name and colour, but they are too well known to need any comment in their favor, as most all amateurs in the vicinity have seen them in bloom to their great satisfaction, so those who wish to have roots that are genuine, apply at the right place, and lower than any other in the city as to quality.

Besides he offers a general and good collection of Garden and Flower SEEDS, fresh imported, that cannot be raised to perfection in this country; he has selected from Europe, and will dispose of them on reasonable terms, with a general collection of Greenhouse, Herbaceous and hardy plants, also Bulbous Roots. Catalogues can be had at his establishment, corner of Pine and Lexington street, Baltimore, by

JOHN FEAST,
Florist & Seedsman.

ap 24 3t*

FARMERS' REPOSITORY

OF AGRICLTURAL IMPLEMENTS AND EASTMAN'S CYLINDRICAL STRAW CUTTERS IMPROVED.

THE Subscriber informs the public that he has secured by letters patent his late and very important improvements on his Cylindrical Straw Cutter, by which improvements they are made more durable and easier kept in order. All the machinery being secured to an iron frame the shrinkage, wear and decay of wood is avoided. The feeding part of his improved machine is upon an entire different principle from the former machine; far more durable, requiring neither skill or care to keep it in order. These machines are so constructed as to make the freight on them less than half what it cost to ship the former or wood machines, an important desideratum to purchasers living at a distance; and I now offer it to the public upon the credit of my establishment as the most perfect machine in existence for the same purpose. They are also adapted to cutting rags for paper making, and for cutting tobacco as manufactured by Tobaccoists, &c.

I also keep these machines on hand made as heretofore with my new feeding machinery attached to them; and also a general assortment of Agricultural Implements, as usual. Elliott's Horizontal Wheat Fans, and Fox & Bolland's Threshing Machines are both superior articles.

My stock of Ploughs on hand are not equalled in this city either for quality, quantity, or variety. I have a large assortment of Plough Castings at retail or by the ton, and having an Iron Foundry attached to my establishment can furnish any kind of Plough or Machine Castings on reasonable terms and at a short notice.

All repairs done with punctuality and neatness. On hand, a few Patent Lime Spreaders, Horse Powers, &c. &c.

Also just received, a fresh supply of Landreth's superior Garden Seeds. In store, superior Timothy and Orchard Grass Seed and Seed Oats. All implements in the agricultural line will be furnished by the subscriber, as good and on as reasonable terms ascan be had in this city, with a liberal deduction to wholesale purchasers. Likewise will receive orders for Fruit Trees from Mr. S. Reeves' Nursery, New Jersey.

JONATHAN S. EASTMAN,
Pratt street, Baltimore,
Between Charles & Hanover sts

feb 20

A NEW-FOUNDLAND SLUT.

For sale, a large size New-Foundland Slut, of large size and very handsome. Her color is black. She is thoroughly broken to the gun, and in pup to a bull dog; price \$20. Enquire of the editor of the Farmer and Gardener, Baltimore, Md.

ap 17

THE FARMER & GARDENER

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, E. P. ROBERTS AND SAMUEL SANDS—EDITED BY E. P. ROBERTS.

No. 3.

BALTIMORE, MD. MAY 15, 1838.

Vol. V.

THIS publication is the successor of the late
AMERICAN FARMER.

and is published at the office, at the N. W. corner of
Baltimore and North streets, over the Patriot office, at two
DOLLARS AND FIFTY CENTS per annum, if paid within one
month from the time of subscribing, or \$3 if after that
time. All letters to be post paid.

BALTIMORE: TUESDAY, MAY 15, 1838.

SPRING WHEAT.

The editor of this paper will thank those gentlemen to whom he sent parcels of Spring Wheat, who may not yet have paid him, to remit him as early as possible, the sums by them respectively due him.

LIMING.

We are gratified to learn that this mineral is pushing itself into the favor of agriculturists in every direction of our country, and that its effects, where properly used, have been of the most decided and beneficial character, operating with equal service upon sandy as upon clayey soils, producing wherever tried a most salutary change not only in texture of the soil but in its productiveness.

CLOVER SEED.

From the greatly increased use of clover seed, we think it eminently worthy of machinists to try their skill in the discovery of some cheap and simple machine for cleaning it. Such an invention would not only prove highly valuable to farmers, but would, if the machine was afforded at a moderate price, be a source of great emolument to the inventor. The great price at which labor-saving machines are generally held, tend very much to restrict their use, and we have always thought those holding rights but ill consulted their interest by demanding such extortionate prices for their machines—the turnip drill, for instance, would long since have been in the hands of almost every farmer, but for this very circumstance.

AGRICULTURAL SOCIETIES' CONSTITUTIONS.

As there are now several Agricultural Associations in a course of organization, we have thought it would be promotive of the object to transfer to our columns the form of a Constitution, which

will be found in another column, and would merely add, that we think an additional article of the nature of the one which we append to this paragraph, should be engrafted in every constitution which may be formed:

"ART. — Every member of this Society shall at each annual meeting, produce an essay or communication upon some subject connected with husbandry or horticulture, descriptive of some experiment which he may have made, or giving the process and result of some crop which he may have made, which said essay, communication, or description shall be published in some agricultural paper, to be selected by the society."

If this plan was to be adopted, a fund of agricultural information would be gotten together of the greatest interest to the country, and surely it will not be said that such a requisition would impose too much trouble on the members, for there are rainy days enough in each year when such employment would be a source of delight to the farmer and planter.

THE RIGHT SPIRIT.

We publish the following Circular of the Trustees of the Massachusetts Agricultural Society to show to our readers the deep interest manifested by the officers of this old and justly valued institution in the improvement of agriculture. Such attention to this important branch of industry is entitled to every praise, and will not fail to exert an influence upon the happiness, comforts and resources of the people of that State of incalculable value, as nothing can be truer than the assertion that wherever you see a community emulous of distinction in the arts of husbandry you will find them in the possession of the elements of real prosperity.

PREMIUMS OF MASSACHUSETTS AGRICULTURAL SOCIETY, FOR 1833.

THE BEST CULTIVATED FARMS.

The Trustees, with a hope of further awakening the attention of the farmers of Massachusetts to a sense of the importance of good cultivation, and at the same time of exciting an honorable competition for exhibiting the best cultivated farms, have decided to appropriate to this object six hundred dollars of the funds entrusted to them, the present season, as follows:—

For the best cultivated farm of not less than 75 acres exclusive of wood land, regard being had to the quantity of produce, the manner and expense of cultivation and the general appearance of the farm,

For the next best,	\$200 00
For the next best,	175 00
For the next best,	150 00
For the next best,	57 00

To obviate the objections which some claimants for premiums may have to making a written statement of the condition, products and management of their respective farms, as heretofore required, the Trustees propose to relieve them of this trouble by an inspection, either personally or by an agent, of the farms which may be offered for premium.

The person or persons making the inspection, will require of the respective owners or occupants of farms, answers to the following inquiries:

Of how much land does your farm consist exclusive of wood land?

What is the nature of your soil; does it consist of sand, gravel, clay, loam or peat?

If of a part or all of the above kinds: what do you consider the best method of improving them?

How many acres do you till, and how many cart loads of manure (meaning by cart loads thirty bushels at least,) do you generally put on acre?

Is your manure applied in its long or green state, or in compost?

Do you spread and plough in your manure, put upon fields to be planted with corn or potatoes, or put it into the hills?

What is your method of ploughing and cultivating green sward?

How many acres of upland do you mow, and what is the average quantity of hay upon an acre?

How many acres of grass land do you irrigate; at what season; and how long do you allow the water to flow your land, and what is the effect?

Do you manure the land irrigated, or any other land you mow, how much to an acre, and what kind of manure do you put on?

How many acres of low land, not suitable for the plough, do you mow and what is the quality and quantity of the hay cut the present year?

What is your method of reclaiming low, bog or peat lands, and what has been your success?

How many acres of corn have you planted the present season; what was your mode of preparing the ground and the seed, the kind and quantity of manure used to an acre, the manner of applying it, and the quantity of corn raised to the acre?

How many acres did you plant with potatoes,

the present year; what was your method of planting, your manner of cultivating, and what the average quantity raised on an acre, and what kinds did you plant?

What number of acres of other vegetables did you plant, what kinds, and how many bushels of produce had you to the acre, and to what use shall you apply them?

How many acres of Winter or Spring grain did you sow the present year; how was the ground prepared; what quantity of seed did you sow on an acre? If you have raised wheat, of what kind; the nature of the soil, and was it sown with or without using lime?

How many acres have you laid down to grass the present season, at what time in the year did you sow it, how much seed to the acre, and was it sowed alone or with a grain crop?

What are your means, and what your manner of collecting or making manure?

How many oxen, cows, young cattle, horses and sheep do you keep through the year?—What is the size of your barn or barns; and have you a cellar under them; is your manure covered?

Are your cows of native, foreign, or mixed breed?

What is your management of calves intended to be raised?

How much butter did you make this year, and how much cheese, and what proportion of it new milk?

How many swine did you keep, what quantity of pork did you make, and of what breed were your swine?

What do you feed them upon through the summer months, and on what do you fatten them?

How many cart loads of manure do you take from your hog styes in a year, and of what materials is it made?

What number of hands is employed on your farm, and what do you pay for labor?

What is the number of your Apple trees, and are they of natural or grafted fruit trees?

What number of fruit trees have you exclusive of Apple trees?

Have your trees been attacked by canker worms or borers, add what is your method of destroying them?

In the cultivation of your farm, do you allow the use of Ardent Spirits?

The Trustees are desirous that these questions should be answered with as much particularity as possible. The applicant will not however be required to answer them under oath, but according to the best of his knowledge and belief.

The Trustees hope and believe that by the method proposed, many important facts may be elicited, and the farming community enabled to derive much useful information from the skill and experience of practical farmers.

N. B. Claims to be addressed to Benjamin Guild, Esq., in Boston, before the first day of October next.

Form of the Application.

To BENJAMIN GUILD, Esq. Boston.

Sir—The subscriber, living in the town of —,

hereby makes known his intention of applying for premium for the best farm, and offers the same for inspection.

HISTORY OF CULTIVATION OF SPRING WHEAT.

By the Rev. Hy. Colman, Commissioner of Agricultural Surveys of the state of Massachusetts.

(CONCLUDED.)

Manures for Wheat.—A new theory of vegetation has been suggested by some distinguished European philosophers, which professes to approach nearer to a solution of this great mystery than has yet been reached.

"A new substance has been discovered in all soils and manures, which is denominated *humin* or *geine*. It has been found likewise in all barks; in saw-dust, starch, and sugar. Humin is a substance not unlike carbon, for which it has hitherto been mistaken. It combines with the salts and forms the humic acid. There is a strong analogy between humin and other nutritive substances, such as gum or secula. It forms a humate with an alkali, which is very soluble in water. All substances which contain carbon are dissolved in the water of vegetation through the means of humin; and the dissolved mass is taken up by plants as food. Humin in combination with lime, ammonia or potass also becomes soluble in soils or dung. Humic acid and carbonic acid gas mixed with water, according to this discovery, constitute the chief food of plants. Every description of manure is only valuable in proportion as it contains these substances.

Such is the modern theory of vegetation; which is in itself plausible, but which will be farther tested by the lights of chemical science; from which examination the best results to agriculture are to be expected. Lime causes the evolution or extraction of this matter from various substances. Potash leads to similar results, and with more power than lime and bone manure; and night soil and all animal manures are supposed to furnish humin or geine in abundance. In respect to night soil or human excrement, a discovery has been recently made in France, which promises valuable results. The charcoal procured from burning wood, peat, or coal in close vessels has been mixed with it in the form of a fine powder, which operates to disinfect it of all offensive odor, and reduce it to a powder, which is portable and may be easily distributed. I have seen this process perfectly effected in the course of an hour. Manures in a decomposed and fermented state are said to supply this humic acid much more abundantly than in a crude or fresh state. In what precise condition they are best applied must be matter of farther inquiry and experiment; and depend somewhat on the mode of their application. If designed to be spread broad-cast and ploughed in, experience seems decidedly in favor of applying them in a green and unfermented state; but its as well decided that green and unfermented manure should never be brought in immediate contact with the roots of a growing plant.

Limes are found of various qualities from their different measures of combination with siliceous, argillaceous, or magnesian earth. Magnesia is found combined with some of our lime-stones in

considerable quantities; and when in great amount is deemed prejudicial to vegetation. The quality of our various lime-stones is of great importance; and this will soon be furnished to us by the highest authority.

The Grain Worm.—There is another circumstance deserving of particular attention. In many parts of the country the wheat crops have been destroyed by what is called the Grain Worm; (the *Cecidomyia tritici*.) A small black fly, in immense swarms, is seen hovering over the wheat fields, in the season of flowering, and deposits her eggs upon the plant, which presently produce small orange-colored maggots, which are found in the grain and entirely destroy it. This worm is first spoken of as appearing in England, in 1796; and afterwards prevailing to a great extent in 1828, and producing the most severe losses in the crops. No certain preventive has yet been discovered. The worm appears in the season when the wheat is in flower; and some farmers have professed to find a perfect security by sprinkling their wheat fields at this time, when wet with dew or rain, with finely powdered lime, at the rate of a peck, and in some cases a bushel, to the acre. Other farmers have failed in this application; but whether the application was made at a proper season, and under proper circumstances, is not determined. An intelligent farmer in West Newbury, the present season, assures me, that he applied it to his fields, which escaped the ravages of the insect, while the fields of his neighbors adjoining his suffered severely. Facts are far more valuable than mere hypothesis, and though enough may not have been as yet accumulated to decide this matter, yet what has already taken place is sufficient to encourage farther trials. A perfect preventive against this alarming depredator would be worth millions to the country and the world. The thorough liming of the soil has, without doubt, a beneficial influence in destroying the germs of insect life.

In several remarkable cases, where wheat has been sown very early or very late, it has either passed beyond the season of liability to injury from the fly before his arrival, or his season of doing injury has passed away before the wheat has come into a condition to be injured by his attacks. The season of injury is at the time of the flowering of the wheat. The wheat crop above referred to, planted late in May, escaped to a great degree; the crop sown in June entirely escaped his depredation; though other crops in the vicinity, in a different state of forwardness, severely suffered. I lay the case fairly before the farmers, and must leave the decision to themselves.

Diseases.—Of other evils to which the wheat crop is exposed, I shall add little to what I have already stated. If the rust and mildew are parasitical plants like the smut, the seeds of which, by means which no sagacity has as yet discovered attach themselves to the wheat plant, it is certain, from the fullest experience, that the development is particularly favored by certain conditions of the weather; and that they seen, in most cases, contemporaneous with the presence of heavy dews and hot, steaming, sultry fogs. Sure preventives in this case are not known; but I recur again to an important fact, stated in relation to this subject in my First Report on the Agriculture of Massachusetts: I mean the case of two farmers in the

vicinity of each other, whose wheat fields, in respect to soil, aspect, seed, preparation and cultivation, seemed precisely alike. The field of one was severely blighted; the field of the other yielded a fine, healthy, plump grain; and the only circumstance of difference of treatment in two cases, which I could ascertain, was, that the owner of the latter field, for several mornings during the continuance of the damp and foggy weather, and when this grain was covered with a heavy honey dew, caused it to be swept and the moisture shaken off by drawing a rope over the standing grain.

Harvesting.—In respect to harvesting the grain, experience and observation are best able to decide the proper time of cutting. It is better to gather it early rather than late. When suffered to stand until dead ripe, much of the grain will be lost in the field. When gathered early this loss is prevented, and the grain be heavier and fairer. An eminent English farmer states his saving by cutting his grain early as, in his opinion, equal to one fifth. The general rule to be given is, to cut the grain when the culm or stalk under the ear appears to be dead; but in this case it will need some "making" in the field.

Of the mode of gathering, cradling, as it is termed, is preferable to reaping, where the grain is not lodged; but what is called a Scotch bow; of which some account is given in the N. E. Farmer of 2d August last, has been found as efficient and useful in a careful hand as the best formed cradle. It is simply a hoop bent in an elliptical form, and firmly attached to the snath, by which the grain is received after it is cut, and deposited by the mower as regularly as with a cradle. The advantages, which it presents over the cradle, are, that the expense of it is trifling, as any farmer can make it; it is very light; and it can be used with ease by any one who understands the proper use of a common scythe. It was introduced into Maine by one of the most intelligent and public spirited farmers in that state; and has been spoken of the past season with the strongest approbation.

Sowing Clover with Wheat.—I add, in conclusion, to every farmer, who proposes to sow wheat, my advice to sow with his wheat a few pounds of southern clover. It will not injure the growth of the wheat. It will protect the land from the effects of drought after the wheat crop is taken off; and should he choose to continue the cultivation of the field, the land will be enriched by the ploughing in of this green crop with the stubble, to an amount vastly exceeding the cost of the seed and the expense of the sowing. On such a clover ley gypsum may be ordinarily applied to great advantage; and I have known lands thus managed gradually made better, even after a repeated succession of grain crops, without any other manuring than the gypsum applied to the clover and the ploughing in of the clover and the stubble. Some experiments in Berkshire County induce the conclusion that the clover should not be turned under in a state of great luxuriance or succulence; but rather in a decayed or matured state. This point deserves observation and experiment.

This is the year for the re-appearance of the "seven year locusts," their last appearance having been in 1831.

[From the Genesee Farmer.]

MANAGEMENT OF HARD-PAN SOILS, OR GRASS LANDS.

We believe it a settled principle, in all the present approved systems of agriculture, that to produce the grasses or herbaceous plants, commonly used for feeding cattle and sheep, it is necessary to plough and cultivate the land occasionally, and would be, if our object was the *graminee*, or food used for the sustenance of man. This doctrine, it is true, is not the doctrine popular among that large class of farmers who have many to-morrows in their calendar; but it is, we apprehend, the only system that will furnish us with profitable crops. We admit, in its fullest extent, the position that grasses being generally cut before ripening their seeds, do not exhaust the soil of its productive power as much as grain; and may, therefore, be continued from year to year without the same amount of injury; and we are willing to go further, and admit that in cool and moist climates, grasses adapted to the soil, may be continued by top dressing with calcareous matter and manure, for a succession of ages; but we greatly doubt whether it pays the expense, and in neither case is it as productive as in a course of alternate husbandry. Fields which have been long continued in grass, do not indeed become entirely naked and devoid of vegetation, even with close pasturing, because nature exercises more kindness and care over our race, than to permit the total destruction of the means of subsistence; and she, therefore, supplies other kinds of grasses than those we cultivate, mingled with all the weeds and rubbish of the neighborhood. And we can aver with still greater certainty, that the grasses produced with ploughing and tillage, will never compare in nutritive properties with clover, or the other grasses commonly used in a course of alternate cropping. It is indeed a matter of deep regret, that in the vast variety furnished from the magazine of nature, our knowledge of the most nutrient herbage is exceedingly limited; but it is not the less our duty to apply what knowledge we possess to useful purposes. We know that clover, orchard grass, and some other varieties, which can only be produced by tillage, have a tendency to fatten cattle, and that all the grasses having that tendency in the greatest degree, are artificial or cultivated, and not the natural productions of the soil. The former do appear when first sown, and when the roots have fresh pulverized earth to shoot in, and they would entirely destroy or supersede the latter, but the trial comes when they have both been in the same pasture or meadow several years, when the fibres from long growth are matted together, and the cultivated grass has met with powerful neighbors to dispute every inch of ground. We see that if orchard grass or clover, if left to defend themselves under such circumstances, are very soon overpowered—in a few years they become sensibly diminished, and plants of a hardier race, or that are more congenial to a close and compact state of the soil uniformly take their place.

Grass lands, on this side the Atlantic, when continued long in a state of sward, become filled with such a multifarious, incongruous, heterogeneous mass of plants, that it is a perversion of

language to call them grass; red-top, cow-grass, rib-grass, quack-grass, goose-grass, cow-slips, butter-cup, daisies, dandelions, strawberry-vines, and many other tyrannical usurpers fill the land, which, under the alternate system, would be occupied with the most beneficial and nutritious food. We read sometime since in a British publication, a fact showing that we are not speaking at random, when we alledge the same results from similar causes in England, where the lands are continued in that state for hundreds of years, at a heavy expense to the proprietors, of manuring, weeding and dressing. Thomas White, Esq., a resident of the county of Norfolk, with a view of ascertaining what kinds of food were growing upon his sheep pastures, when on a superficial examination, appeared filled with white clover, at the suggestion of the celebrated Bakewell, who told him his pastures did not furnish nutritive food for his flocks, procured from nine different spots as many different pieces of turf, dug up about six inches square; he planted them in his garden, and in an incredibly short space of time found that respectively produced as follows:

No. 1. 14 different kinds of grass and weeds.

2.	5	"	"	"
3.	10	"	"	"
4.	3	"	"	"
5.	7	"	"	"
6.	5	"	"	"
7.	9	"	"	"
8.	6	"	"	"
9.	15	"	"	"

Now, if these facts are admitted, and we see no reason to doubt them, we arrive at the conclusion, that grass lands must be ploughed, and the artificial or cultivated grass seed supplied, or the annual loss must be continually increasing. If it *must* be ploughed, we consider the whole argument conceded; because, whether fit for grain, for root crops, or for nothing at all, the expense of ploughing is incurred, and surely some crop ought to be attempted. (a)

In the cultivation of the soil, the Bountiful Giver of good permits us to possess and enjoy his benefits, although claimed for their exclusive use by the other members of the family. We have never yet planted Ruta Baga without obtaining over 1000 bushels to the acre; and thanks to General Barnum, we are annually raising from 5 to 700 bushels of potatoes from the same extent of surface. Our wheat crop has never yet failed upon our turnip or potatoe ground, nor even upon clover sod when properly prepared and *limed*, and we want no better illustration of the utility of our plans, than the one drawn from the Norfolk system of husbandry, or proof of the natural adaptation of our lands to the purposes for which we have used them.

We are asked to furnish a mode of changing the texture of the soils under discussion, and of rendering them friable and productive; it would better have suited our notions of procedure to have first established the fact that they required alteration; and we ought, at least, to have been furnished with an analysis before we were called upon to name the constituents that would supply the deficiency. (b) As, however, it seems to be admitted that in parts of Cayuga and Tompkins, the necessity for making any change does not exist, because the heavy clays of those sections are al-

ready filled with lime and siliceous matter, which make them crumble to pieces when exposed to the influence of the atmosphere, the request may be considered as already answered; if lime and sand have this effect, the object is accomplished; if any deficiency of these essential earths exist in other places, supply them. Our analysis shows, as others probably would show, a deficiency of the lime but not of the sand; this deficiency we are all busily engaged in supplying, and we should be exceedingly gratified if the Editor of the Farmer, or any of his correspondents, would enable us to compare our own analysis with the southeastern part of Cayuga and Tompkins counties, where they are not modified by the proximity of the lake.

We have no objection to the term 'indurated clay,' nor any doubts of the existence of such a substance; but we doubt the propriety of its application to any considerable portion of the surface soil, of New England, New-York, or the northern counties of Pennsylvania; 'indurated sand' would be quite as near the truth. That there are such spots, of very limited extent, is probable; but the term 'hard-pan lands' is applied, with few exceptions, to all the lands having a retentive subsoil, whether that subsoil is composed of argillaceous materials, or of cemented sand and stones, and very frequently when the surface soil contains no injurious proportion of either the one or the other; and this is especially the case when this subsoil is within two feet of the surface.

We may, perhaps, be exposing our ignorance, (c) but we must frankly acknowledge, that we have never known such a substance as hard-pan, or if it is a more philosophical expression, a mixture of indurated clay and sand so near the surface, as to impede the operation of the plough, excepting always immediately under the cradle knolls, which in New-York and northern Pennsylvania deface the surface of some of the finest lands in America. If there is any considerable body of such lands, the cultivation and improvement of them must depend upon their constituents, and ought not to be attempted without ascertaining what they are.

We have always attributed the existence of hard-pan under such knolls, to the circumstance of its being placed beyond the reach of frost and solar heat; nor have we known it to continue long in possession of its indurated properties, or even its name, after being exposed any considerable time to their pulverizing power, but ultimately becoming friable and absorbent. This desirable result would unquestionably depend upon its constituents, and is greatly facilitated by the addition of lime. A very intelligent man at our elbow, who is perhaps too much given to generalizing his thoughts and expressions, and who may perhaps attribute too much to the influence of frost and caloric, is firmly of the opinion, that if we were deprived of their aid, the whole country, surface and subsoil, would become 'hard-pan.' He draws this conclusion from a careful examination of the upper and lower stratum, and the operations of heat and cold upon the latter. We could furnish a large amount of evidence, that the hardest of the hard-pan, when thrown up from the bottom of cellars, wells and ditches, and mixed with 10 per cent. of lime, or any other substance calculated to loosen its tenacity, has become more permanently

productive than the vegetable mould around it; and we are convinced that many of those subsoils, where they do not contain more than 20 to 25 per cent. of alumine, if turned up in the fall, and not worked in the spring until fully dry, become very soon sufficiently pulverized to produce almost any kind of crop. This treatment we know has been successful when applied to the upper soil, which seldom contains more than 15 per cent. of clay, and hardly ever less than 70 of sand.

Our advice, then, to the occupants of hard-pan lands would be—if your land is too wet, drain it; if it is too dry, moisten it with applications of gypsum and ashes; if hard and difficult to work, lime it; but never hesitate to plough it when it begins to show a diminution of the crop. It will bear potatoes, ruta бага, and every other production necessary for sheep and cattle husbandry; if clovered and limed, it will bear ploughing, fallowing and alternating as well as other stiff soils; every succeeding crop will be improved by the green sward being ploughed under, by increasing the absorbent power, and diminishing the cohesion, by pulverizing and opening the land to gaseous and atmospheric influence; and if it will bear nothing but white clover, (which we must be permitted to say is an unnatural partiality,) the succeeding crops will pay the expense three-fold.—This rule, however, must not be applied to land bearing good crops; it is a folly to plough a sward yielding two or three tons per acre in hopes of obtaining a better.

HOLKHAM.

NOTES.

(a) There certainly should be some crop not only attempted, but grown in such cases, and we will inform Holkham how some farmers in New England, who are occupants of hard pan soils, and who cannot afford the heavy expense of procuring lime to change their lands, manage, when they wish to renew their grasses for mowing or for pasture; and we have known the same method adopted in this state, under the same circumstances, with success. The ground is well manured on the surface, and then the turf is turned carefully and completely over, well rolled down, a light harrow passed over the surface until the dirt is loosening and the interstices all filled, (brush is sometimes used instead of the harrow;) on this surface, so smoothed and levelled, the oat, barley, or spring wheat is sown, and with this grain the grass seeds required to renew the turf and furnish a new vegetation, free from weeds or foul matters, are put in. Where materials are at hand for altering the character of the soil, and rendering it friable, such as lime or sand, the foregoing may not be the best methods of treating such soils; but that they may thus be kept in good nutritive grasses without frequent or long continued ploughings, does not admit of a doubt.

We may remark here, that if foreign authorities could be allowed to settle a question of this kind, the evidence in favour of permanent pastures or mowings on such lands would be decisive.—"Grass lands on tenacious clays, or heavy loams, when brought, in a succession of years, or perhaps of ages, into a state of great productiveness, cannot be ploughed up without the risk of great injury, and are more profitable in the production of herbage than they could be in grain." (London.) Marshall affirms, "that permanent pastures

feed cattle to a greater weight; that the grasses are more nutritive both for sheep and cattle; that milch cows fed upon them give richer milk, and make more butter and cheese; that the herbage is sweeter and more easily digested; and that such permanent grass lands yield a large profit at a small expense."

(b) Holkham is right here; and nothing but inadvertence prevented the request being accompanied by the following analysis of two kinds of soil, one of loam, and the other of hard-pan, both from different parts of the same field. On the loam, the hard-pan is 18 inches below the surface, and as the field has been frequently sown, on this part wheat or clover has never failed, or frozen out. The hard pan part has been cultivated the same as the other, but wheat nearly always fails, and red clover always is frozen out.—Heavy oats have been grown upon it, but roots of no kind will succeed well upon it, or similarly constituted soils. In this part the plough uncovers the hard-pan.

Loam.	Hard-pan
Silica, . . . 69	Silica . . . 58
Alumine, . . 15	Alumine, . . 31
Carb. Lime, 6	Carb. Lime, 8
90	92

(c) We read this remark of Holkham to an intelligent farmer, who said that he had acres where the plough would uncover the hard-pan at the ordinary depth of ploughing, and that Holkham must be very little acquainted with the argillaceous region of New York, not to have observed numerous instances of the same kind. We do not attribute this mistake of our correspondent to ignorance; but to a forgetfulness of the difference in the geological structure of the argillaceous zone of Western New York, and the sandstone formation of the southern part. The reports made by the gentlemen employed in making a geological survey of this state, would have refreshed his memory, and pointed out to him the source of some of his misapprehensions.

We are somewhat surprised, that Holkham should have demurred at our recommendation of altering the texture of clay or hard pan lands by the addition of sand. We proposed this method, because we knew it had been successful in England;—we had seen its beneficial effects on the tenacious clays of Albany Co.—we had tried on our own farm the addition of sandy loam to hard pan, with the most decided and lasting benefit,—and we have read in the 4th vol. of the Gen. Farmer, page 331, the following from an authority that we presume H. will not dispute. "Sillex is probably the best mixture that can be applied on a farm consisting chiefly of aluminae, because it is by far the cheapest, and few farmers can afford to apply other manures in sufficient quantities to diminish the cohesive, and increase the capillary attraction to a proper extent, but when the sand is well mixed with the clay, the soil is prepared for retaining what further manures may be applied."

It was our intention to have accompanied this paper with some remarks on the points in our correspondent differed most from the opinions advanced by ourselves, particularly the nature of our hard-pan soils, and the kinds of grass best adapted for the culture of such soils, with the reasons for such preferences; but the above analy-

sis compared with Holkham's, will show the essential difference between his hard-pan and ours, and render apparent the necessity of a somewhat different treatment. As the influence of the substratum on the character and quality of the soil formed above it, does not appear to be generally appreciated by farmers; and as the Western District is by nature divided into zones of remarkable regularity which exhibits this influence most clearly, we may at some future time endeavor by description and analysis to show these differences, and their effects. The necessity of a proper attention to subjects interesting to all, in a periodical like ours, and the space already occupied by the subject of soils and hard-pan, will prevent for the present the prosecution of our purpose.

LARGE CROP OF CORN.

Mr. Tucker,—I will give you an account of a piece of Corn, I cultivated last season. The ground had laid in pasture seven years. It was thinly spread over with fresh stable manure, and on the first of May it was turned over very smoothly, and harrowed lightly till all the crevices were filled. On the 5th of May it was planted two feet and a half one way and three feet the other, with the common eight rowed yellow corn, tarred and rolled in plaster. It germinated readily, and gave a healthy, promising appearance through its whole stage of growth. We hoed it, or went through it, twice, and stirred the earth thoroughly, destroying all weeds; the second time pulled out all but four of the healthiest and thriftiest looking plants in each hill. I dispensed with the old fashioned custom of "hilling up," as not only useless and unnecessary but fatal and injurious in its consequences. From a measured half acre 103 bushels of ears were produced.

R. H. SHELDON.

Brutus, March, 1838.

MADNESS IN HOGS.

Mr. Tucker,—Some time in July 1837, I observed my hogs were seized with symptoms of madness, and died daily. I left some 15 or 16 head of very fine shoats. A neighbor passing one day, observed that it was the effects of green buckwheat, to which they had recourse. I closed my fences, and since that time I have lost no more hogs.

Believing that the above is not generally known, and also that it may be of utility to the agricultural community, you are at liberty to publish it in your valuable paper. Yours, respectfully,

WM. McCaughey.

Wayne county, O. March 31, 1838.

MANUFACTURE OF BEET SUGAR.

An address was delivered in this town a few days since, on the subject of manufacture of Beet Sugar, by Mr. Childs, who has spent some months in Europe. He alluded to the German method, lately discovered, which has been patented in every country in Europe. Some of our shrewd ones went to work, and the result of their "experiments" will be found in the Hampshire Republican which accompanies this. Yours, &c.

H. FERRY.

Northampton, April 15, 1838.

The German improvement over the French method of making beet sugar, a patent affair in Europe, consists simply in drying the beets, which are then reduced to a powder by grinding, and changed into a decoction by adding water. The experiment has been thoroughly tried by Mr. ZACHARIAH WILDER, of this town, which resulted in common success. Mr. W. by this process, which, we understand, is as simple as that of making a cup of tea from aromatic herbs, has succeeded in extracting ten per cent. of sugar from the crude beet—and he is confident that at least twelve per cent. can be obtained at another experiment.

For his efforts in prosecuting his experiments to signal success, Mr. Wilder deserves the unqualified thanks of the agricultural world. The result of his labors will give an impetus to the culture of beets in Hampshire county, which cannot fail to be productive of lasting good. But to the process again. The dried powder of the beet was found to yield its saccharine immediately, as the decoction was found to be as sweet boiled as maple syrup, the moment the water was added to the powder. The means used for the clarification were very simple. Animal charcoal and lime were the only agents employed. This eminently successful experiment proves the fact, that the immensely important article of sugar can be manufactured by any intelligent farmer's household, as easily as bread, pies or cakes can be made baked. A rich garden spot of a quarter of an acre, can produce beets enough to make a thousand pounds of sugar; no heavy capital or incorporated company is required to carry on the business. Every individual can make a pound of Indian meal. This important fact has just been proved. Now let us look at the amount of sugar brought into Northampton last year. Why, it amounted to one hundred and seven thousand pounds, which together with molasses consumed, would cost over \$10,000. This is no inconsiderable sum to be expended by our citizens annually. A dozen resolute farmers, by their influence and labors combined, can create that sum from their lands this summer in the culture of the beet. At least, so we think.

LARGE CROP OF CORN.

MR. TUCKER—Please say to the readers of your paper, that from my observations of the White Flint 8 rowed Corn, I think it is at least two or three weeks earlier than most of the varieties planted in this region. Mr. Elijah Humphrey of Caledonia, raised of the White Flint last year, 110 bushels to the acre. The same piece of ground has been planted five years in succession, but was manured well each year.

I will at some early day give my plan for raising bees. I have abandoned the house plan, and would say to those who think of adopting that method, that unless they can take away all the old comb annually, they will not succeed.

OLIVER ALLEN.

It has been suggested to us that the publication of the form of a Constitution for a County Agricultural Society, would promote the formation of more societies. The following form has been drawn up by an intelligent officer of an Agricultural So-

ciety and politely furnished us. It is believed that the execution of its provisions will secure the objects desired. Of course the societies will decide themselves, whether they will become auxiliary to the State Society; though it is to be hoped every one in the State will.

CONSTITUTION

Of the ——— Agricultural Society, auxiliary to the Kentucky State Agricultural Society.

The style of this Society shall be the ——— County Agricultural Society, designed to improve the condition of Agriculture and the Mechanic arts.

ARTICLE 1st. This society shall be composed of such persons as shall subscribe to this constitution, and contribute to its funds one dollar annually, and of such persons as the society shall elect honorary members. The payment of ten dollars or more at one time shall constitute a member for life, exempt from all further contribution.

ART. 2nd. The officers of society shall be a President and three Vice Presidents, a Secretary, a Treasurer and an Executive Committee, to be chosen annually.

ART. 3rd. All the officers shall constitute a Board of Managers for the general administration of the affairs of the society, with power to enact such by-laws as may be expedient, subject to the revision of the society; a majority of them to constitute a quorum.

ART. 4. The President, or in his absence, the senior Vice President shall preside in all the meetings, fairs, &c. of the society. He shall have power to convene special meetings of the society, to appoint agents and committees to effect its proper objects; to take charge of and distribute all plants, books, seeds, &c. which may be presented to the society; to prepare and publish all communications to or from the society in such time and form as may best promote its object and success.

ART. 5th. The Secretary shall keep a full and complete record of all the proceedings of the society, and shall conduct all its correspondence.

ART. 6th. The Treasurer shall collect and keep all the funds of the society, shall disburse them on the order of the society or the President, and shall make a report to the society of all receipts and expenditures, at each annual meeting.

ART. 7th. The Executive Committee shall consist of five persons, whose duty it shall be to prepare suitable places for all the meetings, fairs, &c. of the society, to marshal and conduct all processions, to arrange all articles for sale or exhibition, and to assist in the preservation of order and collection of revenue, under the direction of the President.

ART. 8th. The Society shall meet on the ——— day of ——— in each year, when a Fair for the exhibition and sale of domestic animals and for articles the produce of the farm, garden or work shops, be held, and premiums awarded and distributed; on the succeeding day a meeting of the society shall be held for electing officers, and for selecting judges, offering premiums, enacting rules and fixing the place for the next fair. At this meeting also, any communication from the State Society will be attended to, and the pecuniary concerns of the society audited and published with the general proceedings.

ART. 9. No person, except life members, can compete for premiums without contributing at least \$1 annually to the funds of the society.

ART. 10. In rendering descriptions of objects for premiums, competitors shall be put upon their veracity, and in addition to their own written statements, shall produce other satisfactory evidence, if required; and any person shall be forever debarred all the privileges of the society who shall be convicted of wilful false description.

ART. 11. This society will be auxiliary to the Kentucky State Agricultural Society, according to its provisions, and will exchange reports, &c.

ART. 12. This constitution shall be amended only by a majority of two-thirds of those attending an annual meeting.

PATENT BANKING AND DITCHING MACHINE.

We had an opportunity of seeing on Monday, in full operation, a machine for digging ditches, and at the same time making embankments or dykes, which surpasses any thing of which we had formed any conception. The contrivance consists of a wooden foundation of about twelve feet in length, at one extremity of which are two uprights. In these uprights an axle revolves, on which are two arms of cast iron, having at the extremity of each a cross-piece furnished with four or five teeth, as they may be termed. Inside of these cross-pieces are buckets that receive the earth loosened by the teeth, and, as the axis revolves, deposit their contents on an inclined platform, from which the earth passes and forms an embankment on one side of the ditch. The axle is made to revolve by means of cog wheels connecting it with the gearing. This gearing consists in part of an iron shaft that passes horizontally and a little obliquely in front, and is turned by a capstan. The capstan is provided with a long horizontal arm to which the horse, by which the whole machine is set in motion, is attached. In acting upon this arm the horse walks around the capstan and crosses of course the line of the ditch, but in advance of it. In order to give direction to the machine and prevent it from being drawn aside there are two guide wheels with sharp edges in the forward portion of the foundation, that cut the sod to the depth of about eight inches. The ditch on which the machine was employed when we saw it, was three feet deep, and three feet and a half wide at the top. It was excavated in an uncommonly hard virgin clay soil, such as is found on the high ground between Fell's Point and the Canton race course. At every revolution, each of the buckets is capable of taking up which the teeth above mentioned go, is graduated at will.

We were much surprised at the rapidity and perfection with which the excavation was formed, one foot of finished ditch of the breadth and depth mentioned, together with the dyke, being formed in a minute, or sixty feet in an hour. It is calculated that a single horse of ordinary strength can propel the machine during ten hours of each day, consequently the extent of trench formed would be six hundred feet. To give an accurate description of this surprising process within the limits of a paragraph, cannot be done, and, we must therefore request such as may wish to form a just conception, to witness the performance. In ditching and draining low lands, or dividing prairies where wood is scarce and the soil light or moist, the machine will prove invaluable. The inventor is Mr. GEORGE PAGE, of Keene, N. H. who, as we are

informed, undertook to make something answer the purpose at the suggestion of a gentleman at Washington, whose residence is where much draining is required, and but little wood grows. Mr. EDWARDS, agent for the Sandwich and Boston Glass Company, will furnish any information required.—

The above machine has been made for Col. S. D. Wilkens of this city, for the Territory of Wisconsin, in the prairie parts of which it must prove invaluable.

CULTIVATION OF THE DAHLIA.

This flower has lately been called the Georgina, but without good reason, as there is no other called the dahlia. It is a native of Mexico, but has been brought to such perfection in England, that it is more indebted to that country than to the land of its birth. The climate of the United States is strikingly congenial to its habits, and it grows with great luxuriance: the difference existing in that particular, between growing here and in England, is very remarkable. In a respectable English catalogue, the height of the Alexandrina Victoria is stated to be three feet; while in this country one of the same flower have often exceeded twelve feet. If there is no error in the English statement, the difference appears to be almost incredible. It has become quite fashionable, its many fine qualities and striking beauties having brought it into deserved estimation. When the weather gets warm, about the end of April and beginning of May, you will observe the young shoots which have forced their way through the old stem which is left with the root; split this down, so that a shoot may remain with each piece. Plant in a rich soil in the borders three feet apart, or in clumps, selecting a variety of colors, and placing the tallest growing kinds in the centre. Put the root two inches below the surface, and if it has but one good eye it will make a prettier plant than when it has more. After it has grown about three feet, take some day when the ground has been softened by rain, and drive in a stout stick, from six to ten feet long, about eighteen inches into the ground, near each plant; but take care not to let it be so close as to injure it; or the sticks may be put in at the time of planting. Let the stick be made from 1½ inch plank, planed smooth, with a pointed and notched head, and painted green. The branches of the dahlia are extremely brittle; and if your garden is exposed to the sweeping winds which often occur in the fall, you must tie every branch very carefully to the stick; this will always be the safest plan; otherwise the expectations of a year may be laid prostrate in an instant. Sometimes a few forward buds will open their premature beauties to the burning beams of a July or August sun, but their lustre is quickly dimmed. The latter end of September, some seasons all October, and some times part of November, witness the dahlia in all its glory. The brilliancy of the flowers may be preserved for several days, by shading them. Some of the kinds are inconceivably splendid, and no flower exhibits such a variety of all that is rich and magnificent in colors. What a pity it is, that with all its desirable properties, it should be so tender. The frost operates upon it like a pestilence, and when that has taken place, the stem must be cut off two or three inches from

the ground, and after a few days the root taken up and exposed to dry for some time, then cover it well in *dry sand*, and put it away in the cellar to remain through the winter. A few very dwarf kinds may be planted in pots; but generally they look unsightly, and do not thrive so well as in the open ground.

A GOOD WAY TO ENCOURAGE THE GROWTH OF SILK.

A number of gentlemen, inhabitants of Massachusetts, Connecticut and New Jersey, have requested the American Institute, by letter, to offer a premium at their next Annual Fair, for the greatest quantity of Sewing Silk to be raised on not less than one-sixteenth of an acre of land by a succession of crops to a single season. Satisfactory evidence to be given of the same to the managers of said Institute on or before the next Fair, together with the weight of mulberry leaves consumed, the weight and number of cocoons produced, and the weight of leaves which may from necessity be borrowed from any source to complete the experiment, to be certified to the Institute on oath or affirmation.

To enable the American Institute to carry this proposal into effect, they have forwarded a joint and several obligation payable on or before the first day of October next, for One Hundred Dollars.

At a late meeting of the Institute, the proposal was unanimously accepted. Silk is one of the articles of foreign growth which has been imported of late years to an enormous amount. Measures like the foregoing, calculated to abridge our wants, is, in our opinion, much better than borrowing specie of the Bank of England, which, in the present state of things, is only calculated to enable them to sell us more goods and again stop our career of prosperity whenever they please.—If our influential fellow-citizens will follow the above example, we may soon become exporters instead of importers of Silks. We think editors of papers disposed to encourage the growth of silk and thereby contribute to the independency of our country, will do well to publish the foregoing. It is a good example. Other useful productions may be encouraged in the same way.—*N. Y. Star.*

[From the Bucks County Intelligencer.]

CANADA THISTLE.

There are a great variety of thistles, some are annual—some biennial and some perennial. The two first kinds may be easily destroyed by cutting them down with hoes or mowing before the seed ripens, they are but very little in the way of the farmer, do but little injury to the land and generally looked upon as an evidence of the goodness of the soil. But those that are perennial are very difficult to extirpate, and cannot be destroyed but by a total eradication of the root with all its fibres or by destroying them in the ground. The Canada Thistle is a perennial plant, strikes its root deep into the ground from one to two feet in one single stem with joints one or two inches apart from which small fibres shoot out—from three joints there will spring up new tops if the upper part is cut off or the root broken, and any of the joints left in the ground—when it grows with grain or tall grass such as Timothy, in a good

soil, it throws up generally one stalk from 18 to 20 inches high on the top of which it has a head like the common thistle but smaller and with smaller seeds of the same shape and color, with a down attached to the end of which the wind carries the seed and spreads it abroad—where it grows by the road side or in pasture fields its branches and spreads out a bushy top, the leaves smaller and more numerous than the common Thistle and every leaf is covered with small and very sharp spikes, like needles.

Some years ago I discovered the Canada Thistle on my farm among the Oats; when cutting it the seed was ripe and most blown away from the head, the next year the field was laid down in grass, the Thistle came up very thick, I concluded to destroy it if possible. I had the ground dug up 12 inches deep about a rod square where it grew the thickest; all the roots gathered out that could be found and burned. After lying a few weeks, the Thistles came up very thick from the joints of the broken root that were left in the ground—I then had about two barrels of fish pickle and three bushels of salt put on well mixed with the ground, all this did not destroy the Thistle, it came up from the broken roots that were still left in the ground and grew, but appeared weak and unthrifty—as we did not dig up the whole ground containing Thistle I adopted another experiment to destroy it. My farmer took a grubbing hoe and stuck it into the ground about three inches from the plant and part of the root with the sod, then put a handful of coarse salt into the hole, took the root out of the sod to its place,—in no instance did the root shoot up again, but perished where it was cut off at or near the centre of the hole, the salt gradually dissolving for months completely destroyed it. The seed being spread by the wind over a considerable space of ground, the Thistle continued coming up every summer for three years, and as often as new plants came up they were dug up and salted, by which means the Thistle was totally eradicated. This appears to be a tedious and protractive mode of destroying it, but it is effectual, and one man can destroy a great many plants in a day. The Thistle has been brought from the State of New York into this country by sheep, the seed getting mixed in the wool is carried by them and scattered over the country; it is also brought in Timothy seed.

BUCKS COUNTY.

MAINE TAKEN A NOBLE STAND.

What is more cheering and praiseworthy, than to see a State throw off the sluggish mantle of unconcern which has bound her so long, and stand forth the true and enlightened champion of her own interests? We have repeatedly referred in our paper, to the bounty which the Legislature of Maine, granted last year on the raising of Wheat, that cost the State upward of a hundred thousand dollars; and we now have the satisfaction of publishing the following from the "MAINE FARMER," from which it will be perceived that not only has the bounty on Wheat been continued another year, but the Legislature has also granted a bounty on Corn, a measure which, we have not the least doubt, will be attended with the most beneficial effects:—

"The Legislature of this State have not only renewed the bounty on wheat for the coming year, but also added a bounty on corn. The provisions of the Act give a bounty of one dollar to the man who shall raise ten bushels of wheat, and six cents a bushels for all above until it amounts to two hundred bushels, and three cents for all above.

"For thirty bushels of good sound ears of corn, two dollars—for every three bushels above thirty and up to sixty, ten cents, and two cents for every three bushels above. There were few opposed to this measure, but the decided opinion of a large majority was, that as Maine could raise her own bread, she must raise it—and that it was better, far better, to spend a million among her own people to bring this about, than to send Five out of her territory as she has done every year for many years past for that which she could produce herself.

SALE OF EXTRA STOCK.

TO be sold by Public Sale at Carrollton Hall, on Elkridge, the Farm of John Mactavish, Esq., seven miles from Ellicott's Mills, on Tuesday the 29th of May 1838.—viz.

- 10 Milch cows from 3 to 7 years old,
- 4 Steers 2 years old,
- 2 Bulls 1 year old, nearly full Durham.
- 2 Steers 1 year old,
- 3 Heifers 1 year old.

With the exception of a few of the Milch Cows, the whole of the above stock are the get of "Young Malcolm," the finest Improved Short Horn Bull in Maryland—and are from $\frac{1}{2}$ to 7-8 Blood.

Will be sold at the same time, 2 young Boars—one a full bred Russian, Sale to commence at 10 A. M.

Terms Cash, or Notes at six months with approved Security and Interest.

may 12 JOHN MACKENZIE, Manager.

NEW BALTIMORE SEED STORE.

THE Subscriber having located himself in *Grant street, near Pratt, three doors in the rear of Dinsmore & Kyle's* Grocery Store, takes this early method of informing his friends and the public, that he has commenced the GARDEN AND FIELD SEED BUSINESS, and solicits a portion of public patronage. He has on hand and intends keeping, at all times, a constant and general assortment of the very best FIELD AND GARDEN SEEDS, a part of the latter, being of the last year's importation, and all the growth of 1837.

Also GARDEN AND FARMING TOOLS, of various kinds; a few barrels of ITALIAN Spring WHEAT; BADEN CORN, raised, and carefully selected by Col. Mercer—DUTTON; MANDAN; SIOUX; AND EARLY SUGAR CORN; CLOVER; TIMOTHY, ORCHARD, & HERD'S GRASS SEEDS; BUCKWHEAT; OATS; MILLET, WHITE DUTCH CLOVER; LUCERNE; TREFOIL; SAINFOIN, ENGLISH RYE GRASS, &c. &c.

Farmers, Gardeners, Merchants, Captains of Vessels, and others, are invited to give him a call, as they can be supplied not only with Field and Garden Seeds of all kinds, but also with PLOUGHS; HARROWS; STRAW CUTTERS; CORN SHELLERS; WHEAT FANS, WHEAT CRADLES, &c. &c., together with all other kinds of useful implements of Husbandry, manufactured and kept constantly for sale by John T. Durning & Co. at their Agricultural Store, also in Grant street. Orders for articles in the above line by mail or otherwise, shall be faithfully and punctually executed.

THOMAS DENNY,

Grant street, 3 doors in the rear of Dinsmore & Kyle's.

GROUND PLASTER OF PARIS,

Of superior quality, in bbls. on hand and for sale by JONA. ELLICOTT & SONS, south end of Patterson st. may 8 31

ROBERT SINCLAIR, Jr. & CO.

Light street, near Pratt street Wharf,

OFFER FOR SALE, an extensive assortment of AGRICULTURAL and HORTICULTURAL IMPLEMENTS and SEEDS, comprising all that are required to stock the most extensive plantation. Particular attention is directed towards the manufacturing department, where the most competent workmen are employed and durable materials used.

The assortment of PLOUGHS is large and various, among which are the Double mould board, Sub-soil, Self-sharpening, Improved Davis, &c.

WHEAT FANS—Com. Dutch, Crank Shake, and Watkins' Patent.

CORN SHELLERS—For manual and horse power, warranted to shell 2 a 700 bushels of corn per day.

CORN AND COB CRUSHERS—For breaking the cob in suitable size for feeding stock.

CYLINDRICAL STRAW CUTTERS—of these there are several sizes. The late improvements made have rendered them the most perfect and effective Straw Cutters in the country.

THRASHING MACHINES and Horse Powers.

CULTIVATORS, for cultivating Corn, Tobacco, &c.

DRILL and SOWING MACHINES, for drilling vegetable and grass Seeds.

VEGETABLE CUTTERS, for slicing turnips, mangel wurtzel, pumpkins, &c.

HARROWS—Expanding, Com. Square and Diamond shape.

GREEN'S PATENT and common DUTCH STRAW CUTTERS.

ALSO, Grain Cradles and Grass Sneaths, with warranted Scythes attached, Sickles, Scythe Stones, Grain and Hay Rakes, Hay and Manure Forks, with 2 a 6 prongs, Ox Yokes, Grubbing Hoes, Docking Irons, Ames' Spades and Shovels, cast steel Axes, Bramble Hooks, Hay Knives, Box, Pruning and Sheep Shears, Grass Hooks, Pruning Knives, Children's Spades, and various other Garden Tools.

Merchants wishing to purchase Ploughs and Castings to sell again, will find it to their interest to examine our stock, being the largest and most general assortment in this city, and for sale on liberal terms.

GARDEN & FIELD SEEDS—Just received from Europe, and from the Claimant Seed Gardens near this city, an extensive assortment of Garden and European Field Seeds, warranted fresh and genuine, viz.

French Sugar Beet Seed, Mangle Wortzel, Ruta Baga, superior Beet and Radish Seeds, early and late Cabbage Seed, 30 kinds early and late Peas, bunch and pole Beans, Hybrid and other Turnip Seeds, Cauliflower and Broccoli; Scotch Kale, Parsnip, Carrot, Cucumber, Lettuce, Onion, Summer and winter Squash, Melons, Leek, Celery, Okra, Salsafy Cress, superior assortment of Flower Seeds, Herb Seeds, etc. etc.

FIELD SEEDS—English and Italian Ray Grass, Trefoil, Burnet, St. Foin, Lucerne, white and red Clover, green and blue Grass, early Potatoes, Gama Grass Roots, Baden and Mercer Corn, Italian and Tuscan Wheat, Timothy, Herds and Orchard Grass, Millet, etc.

TREES AND PLANTS supplied at the shortest notice from the Claimant Nurseries, near this city.

Wanted, prime lots Seed, Grain and Grass Seed.

DAHLIA ROOTS.

The subscriber can furnish any quantity of DAHLIA ROOTS to the number of one thousand, recommended to be a choice variety, all of the double kind, and from the well known nursery of Samuel Reevs, Esq'r. near Salem, New Jersey. I can also furnish from the same nursery very superior APPLE TREES for spring planting, if orders are given in soon for them. Peach Trees cannot be furnished from the said nursery before next fall.

J. S. EASTMAN.

CONTENTS OF THIS NUMBER.

Spring wheat—liming—clover seed—Agricultural societies' constitution—the right spirit—premiums of Massachusetts agricultural society, for 1838—history of cultivation of spring wheat—seven year locusts—management of hard-pan soils, or grass lands—large crop of corn—madness in hogs—manufacture of beet sugar—large crop of corn—Constitution of the — society, auxiliary to the Kentucky S. A. Society—patent banking and ditching machine—cultivation of the dahlia—a good way to encourage the growth of silk—Canada thistle—Maine taken a noble stand—advertisements—prices current.

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every Monday

	PER	FROM	TO
BEANS, white field,.....	bushel.	1 25	
CATTLE, on the hoof,.....	100lbs	7 00	8 50
CORN, yellow.....	bushel	75	76
White.....	"	75	76
COTTON, Virginia,.....	pound	10	12
North Carolina,.....	"		
Upland,.....	"	10	12½
Louisiana — Alabama	"		
FEATHERS,.....	pound.	45	50
FLAXSEED,.....	bushel.	1 25	dull.
FLOUR & MEAL—Best wh. wh't fam.	barrel.	10 00	10 50
Do. do. baker's.....	"		
SuperHow. st. from stores	"	7 50	
" wagon price,	"	7 25	
City Mills, super.....	"	7 75	
" extra	"	8 00	
Sasquehanna,.....	"	7 75	
Rye,.....	"	4 75	
Kiln-dried Meal, in hhd.	hhd.	19 00	
do. in bbls.	bbl.	4 00	
GRASS SEEDS, whols. red Clover,	bushel.	8 00	8 50
Kentucky blue	"	2 50	3 00
Timothy (herds of the north)	"	3 00	3 50
Orchard,.....	"	2 50	3 00
Tall meadow Oat,.....	"		3 00
Herds, or red top,.....	"	1 00	1 25
HAY, in bulk,.....	ton.	12 00	15 00
HEMP, country, dew rotted,.....	pound.	6	7
" water rotted,.....	"	7	8
HOGS, on the hoof,.....	100lb.	7 00	7 50
Slaughtered,.....	"		
HOPS—first sort,.....	pound.	9	
second,.....	"	7	
refuse,.....	"	5	
LIME,.....	bushel.	32	35
MUSTARD SEED, Domestic, —; blk.	"	3 50	4 00
OATS,.....	"	34	
PEAS, red eye,.....	bushel.		
Black eye,.....	"	75	1 00
Lady,.....	"	1 00	
PLASTER PARIS, in the stone, cargo,	ton.	3 50	3 75
Ground,.....	barrel.	1 50	
PALMA CHRISTA BEAN,.....	bushel.		
RAGS,.....	pound.	3	4
RYE,.....	bushel.	85	90
Susquehanna,.....	"		none
Tobacco, crop, common,.....	100lbs	3 00	3 50
" brown and red,....	"	4 00	6 00
" fine red,.....	"	8 00	10 00
" wrappery, suitable	"		
for segars,.....	"	10 00	20 00
" yellow and red,...	"	8 00	10 00
" good yellow,.....	"	8 00	12 00
" fine yellow,.....	"	12 00	16 00
Seconds, as in quality, ..	"		
ground leaf,....	"		
Virginia,.....	"	4 50	9 00
Rappahannock,.....	"		
Kentucky,.....	"	4 00	8 00
WHEAT, white,.....	bushel.	1 65	1 70
Red, best.....	"	1 55	1 60
Maryland inferior	"	1 40	1 50
WHISKEY, 1st pf. in bbls.....	gallon.	33	
" in hhd.	"	34	
" wagon price, ..	"		30
WAGON FREIGHTS, to Pittsburgh, ..	100lbs	1 50	
To Wheeling,.....	"	1 75	
Wool, Prime & Saxon Fleeces,...	pound.	40 to 50	20 22
Full Merino,.....	"	35 40	18 20
Three fourths Merino,.....	"	30 35	18 20
One half do.....	"	25 30	18 20
Common & one fourth Meri.	"	25 30	18 20
Pulled,.....	"	28 30	18 20

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,.....	barrel.		
BACON, hams, new, Balt. cured....	pound.	13	13½
Shoulders,.... do.....	"	11	
Middlings,..... do.....	"	11	
Assorted, country,.....	"	10	
BUTTER, printed, in lbs. & half lbs.	"	20	25
Roll,.....	"		
CIDER,.....	barrel.		
CALVES, three to six weeks old....	each.	5 00	6 00
COWS, new milch,.....	"	30 00	40 00
Dry,.....	"	9 00	12 00
CORN MEAL, for family use,.....	100lbs.	1 68	
CHOP RYE,.....	"	1 50	1 62
EGGS,.....	dozen.	12½	
FISH, Shad, No. 1, Susquehanna,	barrel.	6 75	
No. 2,.....	"	6 50	
Herrings, salted, No. 1,.....	"	3 00	
Mackerel, No. 1, ————No. 2	"	8 75	11 00
No. 3,.....	"	5 75	
Cod, salted,.....	cwt.	3 00	3 25
LARD,.....	pound.	9	10

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

		VIRGINIA.
U. S. Bank,.....	par	
Branch at Baltimore,.....	do	Farmers Bank of Virgi.
Other Branches,.....	do	Bank of Virginia,.....
MARYLAND.		Branch at Fredericksburg.
Banks in Baltimore,.....	par	Petersburg,.....
Hagerstown,.....	3a	Norfolk,.....
Frederick,.....	do	Winchester,.....
Westminster,.....	do	Lynchburg,.....
Farmers' Bank of Mary'd, do	do	Danville,.....
Do. payable at Easton,.....	do	Bank of Valley, Winch.
Salisbury,.....	1 per ct. dis.	Branch at Romney,...
Cumberland,.....	par	Do. Charlestown, par
Millington,.....	do	Do. Leesburg,.... do
DISTRICT.		Wheeling Banks,.... 2
Washington,.....		Ohio Banks, generally 3½a
Georgetown,.....	Banks, ½p.c.	New Jersey Banks gen. 3
Alexandria,.....		New York City,..... par
PENNSYLVANIA.		New York State,.... do
Philadelphia,.....	par	Massachusetts,..... 3a½
Chambersburg,.....	½	Connecticut,..... 3a½
Gettysburg,.....	do	New Hampshire,.... 3a½
Pittsburg,.....	2½	Maine,..... 3a½
York,.....	½	Rhode Island,..... 3a½
Other Pennsylvania Bks. 2		North Carolina,..... 5
Delaware [under \$5].... 4		South Carolina,.... 6a7
Do. [over 5]..... 1½		Georgia,..... 8
Michigan Banks,..... 10		New Orleans,..... 8a10
Canadian do..... 10		

TO THE PUBLIC.

Try the New Agricultural Establishment in Grant-street, next door to Dinsmore and Kyle.

Every article warranted to be first rate. The subscribers, grateful for past favors, take this early opportunity of returning their thanks to their customers and the public in general, and beg leave to inform them that they are now provided with a very extensive stock of newly manufactured AGRICULTURAL IMPLEMENTS, suitable to meet the call of Farmers, Gardeners, Merchants, Captains of vessels, and others, viz: 1000 Ploughs, assorted sizes, from \$4 to \$15 each, comprising of the old common Bar Shear, Winand's Self Sharpening; Woods & Freeborn's patent, all sizes, "Davis," "Sinclair & Moore's" improved Hill Side Ploughs, highly esteemed for turning the furrow down hill, with wrought or cast shears; Wheat Fans, of various sizes and patterns, from \$15 to \$50 each, warranted to separate the garlic from the wheat; Corn Shellers, from \$12 to \$20; Cutting Boxes, from \$7 to \$50 each; Corn and Tobacco Cultivators, large and small; Expanding do., Wheat Cradles, warranted to have fingers of the natural growth, and Grass Scythes, &c. &c.; Castings, of all descriptions and patterns, by the lb. or ton, to suit customers, allowing a liberal discount to merchants buying to sell again—finals which will be furnished on the most pleasing terms. I do every article warranted to be of the best quality, in

proportion to the cost price. All orders by mail or otherwise shall be duly attended to with the greatest despatch.

We would particularly call the attention of Country Merchants and others, wishing to purchase agricultural implements to sell again, to the fact, that we will furnish them with articles on better terms than they can be supplied at any other establishment in the city. Our assortment is complete and as varied as that of the most extensive concern in Baltimore.

We have also connected in its operations with the above branch of business a complete assortment of FIELD AND GARDEN SEEDS, kept by Thomas Denny—Also Garden and Farm Tools, of various sorts and of the choicest collection, which will enable our customers to have filled entire all orders in the Agricultural and Seed Departments. mh 26 JOHN T. DURDING & Co.

SUPERB DOUBLE DAHLIAS.

ALSO, GARDEN AND FLOWER SEEDS.

The subscriber offers for sale at his establishment the best collection of Double DAHLIAS offered to the public, and will warrant every root true to name and colour, but they are too well known to need any comment in their favor, as most all amateurs in the vicinity have seen them in bloom to their great satisfaction, so those who wish to have roots that are genuine, apply at the right place, and lower than any other in the city as to quality.

Besides he offers a general and good collection of Garden and Flower SEEDS, fresh imported, that cannot be raised to perfection in this country; he has selected from Europe, and will dispose of them on reasonable terms, with a general collection of Greenhouse, Herbaceous and hardy plants, also Bulbous Roots. Catalogues can be had at his establishment, corner of Pine and Lexington street, Baltimore, by

JOHN FEAST,

Florist & Seedsman.

ap 24 3t*

FARMERS' REPOSITORY OF AGRICULTURAL IMPLEMENTS AND EASTMAN'S CYLINDRICAL STRAW CUTTERS IMPROVED.

THE Subscriber informs the public that he has secured by letters patent his late and very important improvements on his Cylindrical Straw Cutter, by which improvements they are made more durable and easier kept in order. All the machinery being secured to an iron frame the shrinkage, wear and decay of wood is avoided. The feeding part of his improved machine is upon an entire different principle from the former machine; far more durable, requiring neither skill or care to keep it in order. These machines are so constructed as to make the freight on them less than half what it cost to ship the former or wood machines, an important desideratum to purchasers living at a distance; and I now offer it to the public upon the credit of my establishment as the most perfect machine in existence for the same purpose. They are also adapted to cutting rags for paper making, and for cutting tobacco as manufactured by Tobacconists, &c.

I also keep these machines on hand made as heretofore with my new feeding machinery attached to them; and also a general assortment of Agricultural Implements, as usual. Elliott's Horizontal Wheat Fans, and Fox & Bolland's Threshing Machines are both superior articles.

My stock of Ploughs on hand are not equalled in this city either for quality, quantity, or variety. I have a large assortment of Plough Castings at retail or by the ton, and having an Iron Foundry attached to my establishment can furnish any kind of Plough or Machine Castings on reasonable terms and at a short notice.

All repairs done with punctuality and neatness. On hand, a few Patent Lime Spreaders, Horse Powers, &c. &c.

Also just received, a fresh supply of Landreth's superior Garden Seeds. In store, superior Timothy and Orchard Grass Seed and Seed Oats. All implements in the agricultural line will be furnished by the subscriber, as good and on as reasonable terms as can be had in this city, with a liberal deduction to wholesale purchasers. Likewise will receive orders for Fruit Trees from Mr. S. Reeves' Nursery, New Jersey.

JONATHAN S. EASTMAN,

Pratt street, Baltimore,

Between Charles & Hanover sts

A NEW-FOUNDLAND SLUT.

For sale, a large size New-Foundland Slut, of large size and very handsome. Her color is black. She is thoroughly broken to the gun, and in pup to a bull dog; price \$20. Enquire of the editor of the Farmer and Gardener, Baltimore, Md.

MORUS MULTICAULIS TREES.

The subscriber has from 25,000, to 30,000 Morus Multicaulis trees now growing at his residence, with roots of 1, 2, and 3 years old, which will be ready for sale this fall, and which he will sell on moderate terms.

EDWARD P. ROBERTS.

THE FARMER & GARDENER

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, E. P. ROBERTS AND SAMUEL SANDS—EDITED BY E. P. ROBERTS.

No. 4.

BALTIMORE, MD. MAY 22, 1838.

Vol. V.

THIS publication is the successor of the late
AMERICAN FARMER.

and is published at the office, at the N. W. corner of
Baltimore and North streets, over the Patriot office, at TWO
DOLLARS AND FIFTY CENTS per annum, if paid within one
month from the time of subscribing, or \$3 if after that
time. All letters to be post paid.

BALTIMORE: TUESDAY, MAY 22, 1838.

GEOLOGICAL SURVEY OF MARYLAND.

We commence the publication of this highly
interesting document in to-day's paper, and ask
for it the perusal of all. Though local to Mary-
land, the facts and principles which Professor
Ducatel states, and lays down, are universal in
their application, and, therefore, of general con-
cern. The agricultural suggestions which he
makes, are judicious, and we are gratified to find
him taking so decided an interest, as he does, in
urging our farmers on to the improvement of their
lands, by the use of *lime* and *deep ploughing*.—
Two more powerful agents in the melioration of
the soil, we are very sure, are not to be found in
the whole range of the agricultural art, and we
have often witnessed with unmingled regret the
indifference with which both were treated by the
farming community.

Pumpkins.—No one who have ever raised
them will have omitted putting in pumpkins with
his corn. To the uninitiated, we say, take our
advice and plant a goodly number of pumpkin
seed through your corn field. They will not
subtract from the yield of your corn, but add
greatly to your feeding resources.

Those who have not yet got in their *Man-
gel Wurtzel*, or *Sugar Beet* seeds, should not
delay another day. Let them turn to in good
earnest, prepare their ground, and drill in the
seed.

WATER MELONS.

This delicious fruit, every farmer should, and
may raise if he please. If planted twelve feet a-
part, at intervals of every third row through a
part of the corn field, they will thrive well, and
afford one of the most grateful deserts for the fam-
ily that the human palate can desire. We doubt

whether the quantity of corn will be diminished
at all; but on the contrary, believe that, should
the summer prove a dry one, that the shade affor-
ded by the vines will prove highly salutary in
keeping up a moisture in the earth.

POUDRETTE.

The enterprising editor of the N. York Farmer,
in conjunction with a French chemist, has com-
menced the manufacture of this manure, and cal-
culates so to extend his operations as to be able
to furnish a large supply. From the immense
quantity of the *staple ingredient* in its composi-
tion always to be had in the city of New York,
we anticipate that his manufacture will prove ex-
tensively beneficial to the agricultural interests of
our country.

If editors possessed the power of extracting a
liquid from the air like the chameleon, they would
be animals most happily adapted to the necessi-
ties of the present times!!!

CULTIVATION OF VEGETABLES.

Artichoke—(*globe*)—This vegetable is but lit-
tle cultivated in this country, although highly es-
teemed in some parts of Europe. It is a large
perennial plant, which is propagated by suckers,
or by seed. The seed should be sown in May,
and in June the plants may be transplanted like
winter cabbages. Set the plants 3 or 4 feet apart,
on good rich soil, and the following winter pro-
tect them by hilling the earth over their crowns.

The part used, is the large globular flower head,
which should be cut before the appearance of the
flower. When cut they should be soaked and
washed in cold water, then boiled from 2 to 3
hours, and served up like asparagus.

The plant called Jerusalem Artichoke, (*Helian-
thus tuberosa*), is not properly an artichoke, but a
tuberous rooted Sunflower. It has a root similar
to a potato, which contains but very little nutri-
ment, and is of but little value. It is of the easi-
est possible cultivation, and when it has once got
possession of the ground, it is very difficult to e-
radicate.

Beans—The varieties of Beans, like some oth-
er vegetables, are very numerous, and yet all of
them are recommended as possessing some pecu-
liar qualities, which, in the minds of different in-
dividuals, entitles them to preference.

The varieties of *Kidney Dwarfs* may be plant-
ed any time from about the first of May, till the
middle of July.

Pole or running Beans should not be planted

before the ground gets warm and vegetation brisk,
as they are very apt to rot, if planted when the
ground is wet and cold.

The *Lima* is considered the richest of all beans,
but it is a southern production, and requires a long
warm season to bring it to perfection, consequent-
ly it is an uncertain crop in some sections, and of
late but little cultivated.

The *English Bean*, (*Vicia faba*) is a very dif-
ferent vegetable from the other kinds, and but lit-
tle known or cultivated in this country. It is an
annual plant, growing from 2 to 8 feet high, with
a single upright stalk, having pinnate leaves, pur-
ple flowers, and large flat pods growing on the
sides. English Beans do not bear well during the
heat of summer in this country, consequently they
should be planted as early as possible, in order to
have them bearing before the extreme heat of sum-
mer commences. They may be planted in rows
like kidney dwarfs, or the larger kinds in hills like
Indian corn.

[From Loudon's Magazine.]

Remarks on the Propagation of the Dahlia.

By GEORGE A. LAKE, F.L.S. Tulse Hill House.

Every cultivator of the dahlia is aware of the
facility with which it is propagated by cultivating
of the young shoots, plunged in a little bottom
heat. Indeed, from a single root, under proper
treatment, several dozens of young plants may be
raised in a short space of time. Consequently,
this method is universally adopted by nurserymen;
they annually requiring a large stock of young
plants for sale; and by individuals anxious to prop-
agate extensively a new variety. But it ought
not to be practised by amateurs or others, anxious
to obtain fine perfect flowers for exhibition or
otherwise. I speak advisedly, and from experience,
when I assert, that plants raised from cultivating
do not produce equally perfect flowers, in regard
to size, form, and fulness, with those produced by
plants grown from divisions of the tubers, the old
method of propagating the dahlia. It has been
said that plants raised from cuttings flower more
abundantly than those raised by division; but to
this I am not prepared to subscribe.

Physiological botany readily accounts for the
different results of the two methods. The starch,
or feculent matter, stored in the roots, is intended
by nature for the nutrition of the animal shoots;
not only, until the tubers have formed, at the com-
mencement of the vegetating season, the spongioles
necessary for the absorption of the required quan-
tity of pabula; but also when that the spongioles
are unable, from draught, or other causes, to ab-
sorb a sufficiency of nutrient matter, to sustain
the rapidly developing and vigorous vegetation.

Plants propagated by cuttings cannot, of course,
absorb the nutriment prepared and stored, during
the last season, in the tubers of the mother root;
and are forced to form spongioles and tubers for
themselves. But the fecula contained in these

latter is not, till towards the end of the year, sufficient in quantity, or sufficiently ripened by the deposition of carbon, to be, perhaps in any way serviceable.

The potato might be propagated by cuttings of the young shoots, in the same way with the dahlia; but such plants would not, in the early stages of their growth, be nourished by the starch of the tubers; and, therefore, would neither be so strong and vigorous as plants raised in the usual method, nor would they yield a return equal in weight or quantity.

It is well known that tubers and bulbs, when placed in damp situations (the potato, for instance, in a damp cellar), develop their leaf-buds; and that these continue to grow and elongate, without the assistance of rootlets or spongioles, so long as there is any fecula in the tuber or bulb; but that when this is exhausted the stem withers and dies. We hence perceive how important the nourishment derived from this substance is to the vigor of the plant. Hence, too, we may learn why perfectly ripe sets are so much more certain of success than unripe ones; the fecula in the former being so much the more abundant, and more perfectly elaborated. To the unripeness of the sets is attributable the failure of the potato crops in some parts of Scotland, in the autumns of 1835 and 1836, and the consequent misery and starvation of the unfortunate peasantry.

I feel no doubt that much of the disappointment and dissatisfaction experienced by buyers of new varieties of the dahlia, arising from these, so rarely answering the expectations formed of them, is the result of the system of propagating from cuttings. A good seedling is raised: the grower is naturally anxious to make the most he possibly can of it; he therefore plunges the root in heat, and strikes every cutting he can force it to throw out. The young plants are consequently weak and unhealthy, rarely throw out a good flower during the whole season, and are, probably, discarded as undeserving of further notice. My first plant of Brewer's Rival King, was a cutting from a root, which had been much worked, and, consequently, did not show a good flower during the season. The next year, I grew it from tubers, and also from cuttings: the latter always produced imperfect flowers, but the former beautifully perfect ones. With many other varieties, I have found the same difference between plants raised from cuttings and those from tubers.

I would therefore recommend, in order to secure a good and satisfactory bloom, that the roots be laid, in March, in a damp warm place, such as a forcing house, gentle hot-bed, or even a cellar; and that, when the buds show themselves, each root be divided into as many pieces as may be required, retaining a bud to each piece; and that they be then planted separately, in 48-sized pots. The after-treatment is the same as for plants raised from cuttings.

Brixton, Feb. 8, 1838.

[From the same.]

ON THE CULTURE OF THE MIGNONETTE.

BY JAMES CUTHILL.

Mignonette is considered a very simple plant to grow, and so it is in fashion. We generally see it during winter; but a celebrated grower of for-

ced flowers for Covent Garden told me that he never had but one really good crop of mignonette, and by it he made a good sum of money.—After four winters' sowing, without the least failure, I consider my system established; and by it I have had, without the least variation, forced mignonette in flower by Christmas, and as strong as border mignonette. On the 20th of August, I sowed 100 pots of 32's, filled with the following compost: half sandy loam, the other half made up with leaf mould, and road sand, not sifted over them. The pots are then put into a pit or frame, and set very near the glass. The lights are kept off at all times, except during rainy weather, when they are always put on; as, above all things, a drop of rain is never allowed to fall upon the pots, for several reasons. The first of these is, because, rain is often very heavy, and washes the seed out of the pots; secondly, the rain is often too little, and only moistens the surface; and, thirdly, after the 1st of October, rain is too cold, and chills the plants. I water the plants with a very fine rose, and always twice over, but never until they are upon the point of flagging; and, after the first of October, I either warm the water, or use it out of the stove. I remove the mignonette to the front of the green-house, about the 1st of November, for fear of damps. If a succession is wanted, I cut down as many as may be necessary, about the middle of December; and these will make a better blooming and thicker pot of mignonette, than a second sowing, and will save trouble. In thinning, I leave only six or seven plants in each pot; five of them about 1 inch from the rim, and one or two in the centre. In order to show gardeners how wrong it is to let rain fall upon their frame plants during winter, I had two pots of mignonette put on the bare flue of an empty pit in November, giving them no water and no covering; and, upon the 1st of February, brought them into the green-house; and now (February 5,) they are looking well. This speaks volumes: if mignonette will stand 30° of frost, merely because it is kept dry, what will cauliflowers, lettuce, radishes, &c., not stand? The above may appear a simple story to many; but I am obliged to be more particular with winter mignonette in pots, than with the finest stove plant.

Dyrham Park Gardens, Feb. 6.

[From the same.]

ON THE SWARMING OF BEES.

By JOHN WIGHTON, Gardener to Lord Stafford, Cossey Hall Gardens, Norfolk.

Much has been said and written, of late years, on the means of preventing the swarming of bees; but all the various plans suggested have, I believe, proved ineffectual. I have had the care of bees, on what is termed the "humane system," for eight years; but all my experiments to prevent their swarming have failed. Want of room, and great heat in the hive, are held by some to be the causes of swarming. Mr. Nutt of Lincolnshire attempted to obviate these causes, by boxes of a peculiar construction, provided with tubes of tin, made movable for the purpose of ventilation.—Mine are boxes of his making: but I never could prevent the bees from swarming, by allowing them plenty of room. Ventilation is not easily

accomplished; for the bees are sure to seal up the smallest aperture.

Heat and want of room may induce swarming, if there be more than one mother-bee in the hive; but not otherwise. In the former case, the mother-bees will always fight, till one is compelled to quit the hive. The mother, or queen bee, who retires will always be followed by a number of others; and this constitutes a swarm. It is, in fact, a provision of nature for the multiplication of the species. Hence, there is no other way to prevent swarming, but the destruction of the rival queen. This cannot be done without much trouble, and considerable injury to the bees, however easy it may appear to some, who, probably, have never tried the experiment. The worst part is, that the process must be repeated; for, in the breeding season, there are mother-bees in different stages of existence, and some in the larva state, which cannot be detected.

Another suggestion has been made, to destroy the queen-bee out of a swarm, and then replace the bees in the hive. But here the same inconvenience recurs; for, if there should remain another superfluous queen in the hive, they would speedily swarm again, as I have found by experience. Unpleasant as it is to have a hive weakened by swarming, there is, I fear, no possibility of preventing it, while there remains more than one mother-bee in the hive. However wide a space might be assigned to them, the mother bees will always attack one another. If two are imprisoned together, they will fight. Apianians have said many fine things about the queen-bee and her royal government; but the simple truth is, that she is the parent, or mother, of the young progeny. Of this I had myself some doubt, till I observed the mother-bee laying an egg in several of the cells in the month of June last. This, therefore, being a provision of nature to continue the species, there can be no successful scheme to prevent swarming, and to attempt it is mere folly.

Cossey Hall Gardens, Jan. 20, 1838.

THE SUGAR MAPLE.

You are aware, I presume, that immense quantities of sugar are annually made from the juice of the *Acer saccharinum*, in the west of Pennsylvania and New York, with which our forests abound (Professor Kid, in his *Bridgewater Treatise*, says they are "cultivated"!); and, as the peculiarities attending the flow of this juice have puzzled me to explain them, I have resolved to state them to you. 1st, It is as completely locked up by continued warmth as by frost, and only flows by the alternate operation of these agents; yet the same degrees of heat, even after frost, have not always the same effect. Thus, a warm south wind stops the flowing more than a cool northwest wind. A bracing wind promotes the discharge, and a relaxing wind checks it. 2dly, the juice flows for twenty-four hours after a frost, but when a tapped tree has ceased, tap a new tree, and it will flow considerably, as if a certain quantity was discharged by the frost. The juice flows from all sides of the incision. 3dly, tap a tree early in the morning, after a cold night, and no juice will flow; tap it a few hours after, if the day be moderately warm, and the juice will issue in streams. February, and early in March, are the months in which the sugar is made. The

people encamp in the woods, and remain there until the trees cease to flow, or they have procured as much as they require. Now, I wish to know, if the saccharine juice be sap, how it happens that a moderately cold night is essential to an abundant flow next day? The farmers told me, "We can do nothing in sugar-making without cold nights." I thought that the sap never flowed until an increase of temperature took place.—State the facts in your Magazine, if you please; but give me the explanation by letter, or add it to the article.—*M. Philadelphia, March 16, 1837.*

The circumstance attending the flow of sap from the sugar maple of the United States, so accurately detailed by your correspondent at Philadelphia, show, not only what is known from the experience of the manufacturers concerning the flow of the juice, but also under what circumstance the flow is more or less copious.

The movements of the sap of the maple are exactly similar to those of all other trees at the same season, or that are exposed to the same vicissitudes of weather. Why do not trees yield a flow of sap from a wound in summer? Because every drop absorbed by the roots in that growing season is required to supply the demands of the transpiring bark, leaves, and lengthening shoots, with their flowers or fruit; so that there is no excess to run out of a wound. And why does the sap not flow in winter? Because, in that cold season, it is inspissated; and the pores of the bark are then all naturally sealed. On the return of spring, however, the sap becomes fluid; and as soon as the buds begin to swell, an ascending current commences, and continues during warm weather, and is expended not only in enlarging the buds, but escapes imperceptibly and copiously through the porous bark. During this process, should a frosty night or "bracing wind" happen, the pores of the bark are shut up, and the sap accumulates within the vascular membranes; and if, when so collected and pent up, the tree be tapped, an abundant stream will issue out, and continue to run until the surcharge is exhausted, or until a warm state of the air causes a general evaporation of the juices from every other part of the tree, or lastly, until the flow becomes arrested by frost.

Thus, the quantity of sap is alternately scanty and copious, according to the temperature of the air, or as the tree has been more or less previously drained during the spring months; that is, during the period which elapses between the bursting of the buds and the development of the foliage.

That sap keeps ascending to, and accumulating on, the recently formed layers of liber and alburnum, when the juices in the bark are congealed by frost, may be inferred from what often takes place in America, and other northern countries, in very hard and long continued frost; namely, the largest and hardest timber trees are rent asunder by the expansive force of the warmer sap, and elastic gases enclosed therewith.—*J. M. London, April, 1837.*

From the Franklin Farmer.
WATER MELONS.

Mr. Editor—As the season for planting water-melons is fast approaching, I think you ought to

give your readers something on that subject. Failures in raising this delicious fruit are very common, much more so in my opinion, than need be; if I may judge from my own experience, and I have a good deal on this particular branch of horticulture, any one may easily raise a sufficiency for their own consumption. I have no recollection of ever having failed but once, and that from sheer neglect, having over-cropped myself with more important articles. The method which I pursue you shall have, and if any of your readers know of a better I hope they will communicate it, and they shall have the thanks of one at least.

I first select a piece of rich friable loam, that has been in grass if possible; I plough it very deeply and pulverize it as thoroughly as if for hemp; I then lay it off into rows six feet apart, upon which I make the hills also six feet asunder; wherever the hill is to be, a deep hole, not less than 12 inches, is dug and filled with well rotted manure, the earth is then drawn over it and a flat hill is made about 4 inches high; when you are ready to plant, soak the seed for 8 or 10 hours in water, and then having loosened well with a rake the top of the hill, draw a drill about an inch deep directly across the hill in the direction that the rows were laid off, and deposit the seed two inches apart, to the number of ten or twelve, then cover them with the hand, taking care to remove any clods that may be on them; when you think they have had nearly time to come up, re-plant in a parallel line across the hill. The object of putting so many seed is to prevent total destruction by the little striped bug; they are sower of the young plants than older ones, and if they can be prevented from destroying the first before the re-planted comes up, they will desert the older ones. I have tried every remedy which I have seen presented for these pests, but affirm that not one will succeed. My plan is to go with several small boys every morning before the dew is off and kill every bug that can be found, but some will escape the utmost vigilance; hence the necessity of having a plenty of plants and a young set coming directly after the first. So soon as the plants put out the third leaf, I commence working them by scraping the earth away from the vines with a sharp hoe, and loosening the crust over the whole hill, and as soon as the plants are large enough, I run a plough with the bar to them, as close as possible, and then plough out the ground between the rows; the hoes then follow, and scrape away most carefully any earth which may have been thrown to the vines, and not one particle is ever permitted to be drawn about the vines during their whole cultivation; hilling them up is certain destruction if the season should happen to be wet, and will do no good if dry. Here I conceive lies the secret of their cultivation, and if they are afterwards kept clean with the cultivator and hoe, you may confidently expect a good return. So soon as the vines begin to run, draw out all except three of the healthiest, which should be six or eight inches apart. After the vines have covered the ground so that they cannot be readily worked, they should be kept free from weeds with the hand—pursley is particularly troublesome, and cannot be destroyed but by drawing it up by the roots and throwing it in heaps, where the sun will quickly cause it to wither. L.

ONIONS.

On reading an article in the Cabinet of March 15th, 1837, upon the culture of onions in Wethersfield, I concluded to try the experiment of raising them on Delaware soil.

I dressed an eighth of an acre with four cart loads of well rotted stable manure, being a part of a parsnip lot planted last year for spring feeding of milch cows. After the manure was very evenly spread over the ground, it was ploughed in ridges, and planted with nine ounces of seed.

I did not pursue the Wethersfield plan of sowing the seed in rows, but put them in hills, supposing it would take less seed, less work, and produce equally as good a crop. The instrument to plant them was made in the following manner: A lath about four feet long, with four holes bored through it with an inch augur ten inches apart, which were filled with pegs which projected through the lath about one and a quarter inches; then a handle of three feet long was put in the centre of the lath to carry it by; this instrument was then laid across the bed, which, by stepping on it with one foot on each side of the handle, four holes were made ten inches asunder; then moving it about a foot, and repeating the operation, the bed was soon filled with holes ten inches one way, and about a foot the other. A few seeds were then dropped in each hole, the beds raked and rolled, which finished the operation of planting.

As soon as the plants began to appear, the beds were raked between the hills with a small rake, made of tenpenny nails, which retarded the growth of the weeds, and caused the young onions to advance in size and strength before the time of weeding and dressing them with a hoe had arrived. I regard this little operation of early raking the beds as quite an improvement; for part of the ground was not managed in this way, and the process of weeding was much more difficult; besides, in extracting the weeds, many of the young onions would fall down, and some of them were pulled up in consequence of the weeds having acquired a growth equal to the onions.

They were dressed several times through the season by pulling the weeds and using the rake and the hoe. The work being done at intervals, and mostly by children, no very accurate account was kept of the labor, but it did not exceed ten days' work for a full hand. They grew very large, many of them measuring thirteen and a half inches in circumference, and many of the hills had three or four clustered together; they are excellent for the table, fine flavored, with none of that rank, strong taste, so common to onions raised from sets. One of the beds was measured, by which the average produce was over 50 bushels on the whole ground; which would exceed four hundred bushels to the acre.

Although the produce equalled Wethersfield in amount, I was somewhat disappointed on finding several bushels of them not of a merchantable kind; they had thick necks, sort of evergreens; they would neither die or dry, commonly called scullions by gardeners.

I see it stated, I think in the American Gardener, that no crop is more difficult to accommodate with suitable soil, than the onion, in consequence of its disposition to behave in the manner I have

stated. The ground this experiment was tried upon, is rather a stiff clay, but very much softened with lime and manure, yet I presume it is not exactly the soil they like. I intend next season to select a more sandy location, for I am rather pleased with the partial success of the operation.

The onion does not seem to want as much manure as other root crops, particularly the potato and ruta бага turnip; they require, it is true, considerable more labor, but the value of the crop would, upon an average, be double, and more, if the difficulty I have mentioned could be surmounted.

I suppose that two and a half or three acres of onions could be raised by hiring one additional hand through the summer season; besides, it is sometimes profitable to increase the varieties of labor on a farm, when workmen are employed to perform it. In mowing time and harvest, we frequently have spells of wet, damp weather, and a field of roots not only gives employment to all hands during such intervals, but pays the expense of an additional hand through the summer, by which the severe operation of gathering hay and grain is very much reduced.—*Farmer's Cabinet.*

From the Boston Courier.

PLOUGHING AND PLOUGHS.

Mr. Editor—If you consider the following remarks, made agreeably to promise, are worthy of a place under your useful head of Geoponics, they are at your disposal.

Ploughing is considered by all farmers as the most important agricultural operation, either as it regards the immediate crop, or the future and permanent improvement of the soil. The farmer, who so manages his fields, as to produce, in the main, the greatest reward for the labor and expense bestowed, will undoubtedly be considered as acting with a sounder discretion, than he whose sole object is a present crop, without regarding the permanent improvement of his fields. To deepen the soil, by bringing to the surface at each successive ploughing, a portion of the poorer sub-soil, and thereby exposing it to the enriching influence of the atmosphere, and to cover up and preserve from washing rains, and wasting winds, the light vegetable matter upon the surface, as well as to facilitate the subsequent operations of the husbandman, are the only important uses of the plough.

Our old fields are rapidly approaching to a state of utter sterility. At each successive rotation of crops the vegetable mould is becoming thinner, and the product less; and the plough, in the hands of most farmers, so far from deepening the soil, and increasing its powers of producing, is really exhausting it of all its natural fertility, and will soon render it, as has already been done in some parts of our country by the same means, an unproductive waste, unfit for cultivation. The rich treasure, which our forefathers found upon the surface, which had been accumulating for centuries, has been squandered with a prodigal hand. The apparently inexhaustible deposit of vegetable food, which covered the land, has, by an improvident use of the plough, been given to the four winds of Heaven, or washed away into the ocean. They have ploughed, cross-ploughed, and harrowed, till their descendants have little else left than a mere *caput mortuum*.

I have known rich swells of land in Maine, which, thirty years ago, were covered with thick forests, and what would have seemed an exhaustless store of food for vegetation, by means of the plough, robbed of every particle of vegetable sustenance, and now absolutely abandoned by the occupant as worthless.

Strange as the assertion may seem, it is nevertheless true, that farmers generally plough too much. The poorer sub-soil, which is turned up by the first ploughing, instead of being kept upon the surface, till it has become enriched by culture and exposure to the air, is by cross ploughing immediately turned back again into its cold and lifeless bed; and the light vegetable mould instead of being kept beneath, for the benefit of the crop, is, by the same process of cross-ploughing, brought again to the surface, and blown away by winds, or washed away by rains.

The manner of ploughing, and kind of plough, which is used by most farmers, have also a tendency to diminish the natural or acquired fertility of the soil. With ploughs but little differing in construction from common wedges, the ground is not turned over, but crowded into ridges, or the furrows lapped upon each other in such a manner as to expose much of its properties to waste. The writer has ascertained from actual experiment, that an acre of land yielding not more than a ton of hay to the acre, at the usual season of ploughing greensward, say the tenth of May, contains more than twelve tons of vegetable matter, consisting of the roots and tops of grass, and other vegetable remains upon the surface. Such a method of ploughing then as will be best calculated to secure for the benefit of the crop, this mass of enriching substance, the farmer should not hesitate to adopt. By completely inverting the sward, and laying it as flat and smooth as the nature of the ground will admit, and then cultivating the crops without disturbing the sod, with the application of a light dressing of compost, land may not only be kept in heart, but wonderfully improved. With one ploughing in this way, and spreading on one top dressing of compost manure, of about twenty cart loads to the acre, and mixing it finely with the poor earth at the surface, I have raised two crops of grain or roots, and laid the land to grass. In the ordinary way of cultivating, four ploughings, as many times harrowing, and two dressings of manure, are considered necessary. I have then saved three ploughings, and as many harrowings, one dressing of manure, and at the same time have deepened, and permanently improved the soil, and more than doubled my crops. Ten years ago, I was upon the point of abandoning some of my old fields in despair—They had been cultivated in the usual mode of ploughing, cross-ploughing and cropping, alternately under the plough, and in grass, and had become so impoverished, that the products were insufficient to cover the expense of cultivation. The same piece of land, which gave me one ton of hay, will now, at the same distance of time, after laying to grass, give me three.

In the cultivation of land, which has been a year or more under the plough, nearly the same course is to be pursued, especially when it is intended to sow wheat or rye, plough your land so as to turn under the rich mould, bring to the surface a portion of the fresh earth that has never

before been disturbed by the plough, and mix this well, (if the preceding crops have not been well manured) with a light dressing of well rotted compost, and from twenty to fifty bushels of slaked lime to the acre, and I am confident you will never require a legislative bounty, as an inducement to cultivate wheat.

Good ploughing cannot be effected without ploughs suitably adapted to the purpose. In this all-important agricultural implement, I venture the assertion, without fear of contradiction, that the Americans have made greater, and more useful improvements in its adaptation and fitness for the designed purpose, within the last twenty years, than have been made in Great Britain for a century. From a conviction of the indispensable necessity of good ploughing to a successful tillage, near twenty years ago I persuaded the person who occupied the farm I now own, to send to England for an improved Scotch plough, (I think Small's) which was highly recommended in the agricultural publications of that time. This was before the introduction of the cast iron plough into this part of the country. The plough came, and I must confess I was greatly astonished at the first sight of it, and as much disappointed when I witnessed its operations. A large, misshapen combination of wood and iron, it was the laughing-stock of my neighbors, who at once denounced me as a "book farmer." This plough was laid aside, and has been kept for show, and in construction and workmanship, when compared with American ploughs, furnishes a striking illustration of the superior skill and ingenuity of our own mechanics over those of Europe. I can now do twice as much work, and do it infinitely better, with Prouty & Mears' improved plough, with one horse, and a single hand, than a yoke of oxen and a horse, and one additional hand to drive, could do with the famous Scotch plough.

Public attention was first awakened to the subject of improvements upon the old fashioned wedge-like plough, by the writings of Mr. Jefferson, who, in 1793, published his new theory of the construction of the mould-board, formed upon mathematical and philosophical principles. It was in consequence of a suggestion from him, that Robert Smith, of Pennsylvania, in 1803, substituted the cast iron for the wooden mould board, for which he obtained a patent. This was the commencement of a series of improvements, which have resulted in the substitution of cast iron for all parts of the plough, except the beam and handles, and such has been the progress in reducing this implement to a fitness for the purposes designed, that the American cast-iron plough as now constructed, may in truth be considered, as it has been denominated, the most important instrument known to man. About fifteen years since the cast iron share came into general use in this part of the country, Wood's, Tyce's, Hitchcock's, Howard's, and last of all, Prouty and Mears's, have each had their share of public favor. I have particularly attended to the operation of all these, and noticed the defects and excellencies of each. About twelve years ago, Hitchcock's plough, then in general use, and highly approved by the farmers of New York, was introduced into this State by Mr. Prouty, who was well acquainted with the practical use, as well as the construction, of the plough. His science in

agriculture, aided by his mechanical skill, from time to time, suggested to him various and important alterations and improvements in this plough—and about two years since, Prouty & Mears obtained from the government a patent for their “improved cast iron plough.”

The prevailing difficulty with all ploughs, with the exception of the last named, is, that the force necessary in the draught, is not applied directly to the centre of resistance. Writers on this subject, as well as practical farmers, have erred in their notion, that the beam should be placed directly over the land side of the plough, and that the cut of the coulter, or the position of the standard, should be square, or at a right angle with the cut of the share, thinking that if the share and coulter make an acute angle on the land side, the plough will incline to fall to the right. This would be the tendency, unless the other parts of the plough are so constructed as to resist and overcome this inclination. By so placing the coulter as to form an acute angle with the plane of the share, on the land side, the beam is brought more directly over the centre of the plough, as is the case with Prouty & Mears’s improved plough, and thereby the power necessary to move it, is applied more directly to the centre of resistance, and the force required to remove it, and overcome this resistance, is of course less than when applied on one side. I cannot better make myself understood, than by supposing the land, or left-hand side of a harrow, to be kept on a straight line with the line of draught. It will readily be perceived, that the force necessary to draw it, when so placed, will be greater than if drawn in the usual way, by applying the draught to the centre. This is decidedly one of the most valuable improvements in the construction of the plough that has been made in modern times, and for which the public are indebted to the ingenuity and skill of Messrs. Prouty & Mears. A greater ease of draught is not the only advantage resulting from this improvement. Another and perhaps greater benefit is its perfect adaptation to the end designed, by leaving the ground in the best possible condition. The acute angle, which is made in the land side of the furrow slice, by the peculiar construction of this plough, enables the ploughman to lay the furrows together, like the feather-edged boards. This, in greensward, is very desirable, as the grass is thereby prevented from springing up between the furrow slices much more effectually, than when the furrows are cut at right angles. The grass is completely shut in, and will not rise to injure the crop, or increase the labor of cultivation. Not only in greensward, but in old ground, the superior manner in which the work is done by this plough is very perceptible. There is no tendency to crowd the ground into ridges; the soil is taken up, as it were, and turned over, and left loose, and in the best state to derive vegetable aliment from the air, and to enable the roots of plants to penetrate, and strike down in search of food.

Another advantage attending the peculiar construction of Messrs. Prouty & Mears’ plough, is its durability. When the resistance is all upon the side of the beam, there must be a constant tendency of the plough to the left, or land side; the friction is thereby increased in this part, and the wear, of course, is greater: but when the beam is

placed more over the centre of the plough, and the resistance which it has to encounter, is upon both sides of the beam, its movement is more regular, and the friction equal in all parts. These are some of the peculiar properties of this plough, which give it a decided preference to any other now in use. On conferring with some of my neighbors, relative to the work of Prouty and Mears’s plough, it is believed, that in ploughing a field of ten acres, the amount of labor saved, added to the amount gained in consequence of the improved tilth, when compared with the work of any other plough, is fully equal to the price paid for it.

E. P.

Lexington, March, 1838.

GEOLOGICAL SURVEY OF MARYLAND.

By PROFESSOR DUCATEL.

To his Excellency, THOMAS W. VEAZEY,

Governor of Maryland.

SIR:—I have the honor to submit to you the result of the discoveries and observations that have been made; during the past year, in furtherance of the geological survey of the state; and in accordance with the plan hitherto pursued, shall not confine myself to an exposition of the progress of the survey, but will embrace within it such disquisitions as may naturally suggest themselves concerning the economical use of the materials that have been found, adding accounts of the most approved modes (in my judgment) of extracting and employing them, as well as furnishing descriptions of their mineralogical characters and geological relations.

It has also been the custom, heretofore, to preface the account of the mineral resources of each county, by one relating to its physical geography and to its agricultural condition. As the introduction of these subjects in the preceding reports, seems to have met with the approbation of the intelligent farmers of the State, and as it is calculated to remove some unfounded prejudices, regarding certain inherent disabilities supposed to exist in portions of the country to profitable cultivation, it will be continued; the more so that it tends to inspire our fellow-citizens with confidence in the susceptibility of their soils to receive a permanent improvement, and enlightens strangers on the subject of the actual resources of the State, which, upon comparison, will be found not to yield, in this respect, to any section of the Union.

With these preliminary remarks, I have the honor of submitting to your excellency the following

REPORT.

SEC. I. Geological Examination of Kent Co.

The next in the order of surveys that remained to be accomplished on the E. S. of Maryland was that of Kent county, the result of which will be given, for the present, in reference to its physical geography, the character of its soil, and its mineral resources.

This county is embraced within an area of about 332 square miles comprising upwards of 223 thousand acres; and although one of the smallest, was at one time considered among the most productive in the State. It lies between two rivers—the Chester and the Sassafras—that are navigable

for schooners, nearly their whole length, or almost to the boundary line separating the county from the State of Delaware, on the east; whilst its western limits are formed by the Chesapeake Bay. It is moreover intersected by numerous creeks, affording additional facilities for the transportation of its produce by a short and safe navigation to Baltimore, or by means of the Chesapeake and Delaware canal, to Philadelphia. The upper and middle portions of the county form an extensive nearly level plain, with a gradual descent to the S. W. towards the heads of the creeks that empty into the Chesapeake Bay, and about the mouth of Chester river; after which the country falls more abruptly, extending itself into necks of land that are lower, more uniformly level, and nearly encompassed by these creeks.

The tract of land usually denominated the Head of Chester, extending between this river and the Sassafras, and embracing the region about Black’s cross roads, has always appeared even to the most superficial observer a most beautiful farming country. Its surface is gently undulating, and the soil which is loamy, with a substratum of clay, requiring no artificial modes of drainage, is easily cultivated, and as easily improved. In its present condition it is best fitted for the production of corn, rye, and oats, but by the use of lime, or of some of the mineral deposits which it embraces, and that will be presently described, might be made to yield full crops of wheat. It has been much despoiled of its timber, though there are still remaining bodies of very valuable woodland, consisting principally of oaks and hickory. This portion of the county is, moreover, represented to be very healthy. On the river sides of the tract of land now under consideration, the soil is more variable: thus, in travelling the road from Millington to Chestertown, for the first four miles the country is gently rolling, with a naturally good soil, being a clay-loam, sour, and in an unimproved condition. Between New Market and Chestertown the county is more hilly, soil clay-loam, very sour. On the side of the hills the soil is gravelly and ferruginous, the mixed green sand making its appearance in the ravines of the water-courses, overlaid by a highly ferruginous sand. From Georgetown cross roads to the Head of Sassafras, the country presents a succession of moderately undulating plains between the creeks, the soils of which alternate between a sandy-loam and clay-loam, passing into stiff clay. At George Town the high river banks are composed of a ferruginous sand, in some places indurated, overlaying a mixed green sand, without fossils; but on ascending the river, the green sand is free from foreign admixture, and at the Head of Sassafras becomes quite pure and filled with marine shells, the principal kinds of which are the *terrebratala Harlani* and *gryphea vomer*. The banks of the river are generally moderately high, and covered by chestnut, oaks, maple, locust, and a species of yew (*Taxus*.)

The remainder of the middle portions of the county, limited to what was formerly called the Forest, and extending as previously stated to the heads of the creeks, where the country falls in an abrupt slope, partakes of the nature of the district just described, so far as the character of its soil is concerned; but there is a greater proportion of waste ground, less timber, and there have been

lately fewer attempts at improvement. Still there are many admirable locations for farms, and the soil, generally speaking, is susceptible of as high a degree of improvement as any other portion of the county. Here it is the most eligible sites for artificial meadows present themselves, in the rich alluvial bottoms at heads of the creeks.

But the most valuable estates lie in the Necks. The tract of land between Chester river and the N. E. prong of Langford bay, known as Quaker Neck, is level, with mostly a stiff clay soil, more intermixed with sand on the Chester river side, upon which timothy has been found to set remarkably well, and clover and plaster are used with great advantage. Fine crops of corn and oats are raised upon it, and the addition of lime which may be obtained on the spot, would convert the whole tract into first rate wheat lands. The timber is not abundant, consisting principally of red and white oaks, sweet gum (*Liquidambar Styraciflua*), and cedar.

Broad Neck, situated between the N. E. and N. W. prongs of Langford's Bay, in its upper portion, has a light spongy soil, mostly a sandy loam, though on some spots it assumes the character of a clay-loam. Corn, oats, and rye afford the surest and most abundant returns, but where lime has been applied, heavy crops of wheat have been gathered. On the farm of Mr. Joel Vickers, now in the occupancy of Major Jessup, where ashes and lime have been liberally used, as much as forty-seven bushels of wheat have been produced to the acre.—An instructive lesson to farmers of this section, nay of a large portion of the Eastern Shore of Maryland, of what may be obtained from their lands when properly attended to. In the lower parts of the soil is a stiff clay, which, with the addition of lime, would make excellent wheat lands. It also furnishes good timothy lots, and has a fair proportion of woodland, consisting mostly of white oak and chestnut. The outfields, more especially in the upper part of the neck, as well as what is termed the Forest, or high-lands of the county generally, throw up a growth of cedar.

Poplar Neck forms one estate, the property of Major Hynson, the soil of which has a preponderance of clay, and is sour: it is well wooded, the timber consisting principally of black and white oaks, with an undergrowth of dogwood (*cornus florida*), some cedars, a few pines, and a young growth of sweet gum.

Piney Neck, between Langford's Bay and Gray's Inn creek, has a stiff clay soil, which becomes lighter at the extremity of the neck bordering on Chester river. It has the reputation of having formerly produced good wheat crops, but is now much exhausted, requiring a free application of lime. Wherever this has been done, as on the farm of Mr. John S. Constable, the happiest results have been obtained. The neck is well wooded, the timber consisting of the several kinds of oak, chestnut, hickory, gum, pines, poplar, maple, &c.

Skinner's Neck, lying between two prongs of Gray's Inn creek, is principally covered with pines.

Eastern Neck lies between Gray's Inn creek and the Chesapeake bay. It extends, including the Island, which terminates it, about nine miles, on an average breadth of one and a half: its surface

is gently undulating, with a soil of a light loamy character and slightly ferruginous, well adapted to the cultivation of corn, yielding abundantly of potatoes, and would doubtless be found quite congenial to the growth of the sugar beet. The Island portion of the neck, is principally occupied by marshes that afford tolerable pasturages. The timber consists of oak (white, willow, and box, principally,) sweet gum, chestnut, and a few pines. The locust is found to grow rapidly, and some attention is now paid to encourage and increase its growth. The proximity of the neck to Baltimore, the facility and expedition with which its produce can be brought to a market, together with the natural fertility of its soil, would seem to render it peculiarly eligible for the location of market farms, and the plantation of orchards for the supply of choice fruits to the city. The neck is reputed healthy.

The bay-side, from Swan point to Howell's point, a distance of twenty miles, with an average breadth of three miles, presents a long and narrow zone of country upon which some of the most valuable estates in the county are located. The surface of the country is generally level, excepting near the bay-shore, or along the banks of the creeks. The soil is stiff clay, very sour, and consequently greatly in want of amendment by the application of some alkaline matter, either lime, ashes, or the *greensand*. The timber cannot be said to be abundant, though there are some valuable tracts of woodland, consisting mainly of the several kinds of oaks, sweet gum, a few pines, dogwood, persimmon, &c.

The northern portion of the county lying on the Sassafras, and forming rocks of inconsiderable extent, between the short creeks that empty into this river, exhibit less uniformity in the character of their soils. These vary from sandy loam, clay, and clayey-loam, in some places highly ferruginous, and on the slopes of the hills often gravelly. Clover sets and thrives well in most places, and the pasturages covered with the white clover, plainly indicating the aptness of the soil to attain, under proper management, a high degree of fertility. The wooded land consists principally of oaks, chestnut and dogwood; whilst the locust and cedar grow readily, in all parts. Such are the prominent features in the physical geography of the county.

In reference to its geological constitution, the northern and middle portions of the county are based upon deposits of the *secondary* period, referrible to what in our country has been termed the ferruginous sand formation, and embracing extensive beds of *greensand*, containing as characteristic fossils *terrebratula* and *gryphea*, and beds of a micaceous black sand with *belemnites*, *ammonites*, *exogyra*, &c. The superincumbent deposits of clay, sand and gravel, that occasionally present themselves, have very little depth, and belong doubtless to a much more recent epoch, which it is difficult to assign with precision.—The only fossil known to have been found in them, is the grinder of a *mastodon*. They are probably of diluvial origin.

On the banks of the Chester, the southwest portion of the county, including all the necks previously described and the bay-side, the secondary deposits disappear, being replaced by ferruginous clays and sands, which, judging from one or two fossiliferous beds of small extent occur among

them, belong to the *tertiary* period. These materials are in some places very much intermixed with particles of green sand, washed down from the deposits in place of this article that occur in the upper portions of the county. There is no locality among them offering any special geological interest excepting one at Farley, where a ligniferous clay with nodules of pyrites occurs a little above high-water mark, surmounted by a thick stratum of boulders and gravel composed of coarse and fine-grained sandstone, greenstone, micaceous and argillaceous slates, quartz-rock, and quartz, from several hundred pounds weight down to ordinary sized gravel, the whole covered by a clayey-loamy soil upwards of three feet in depth. In this bed of clay there have been found detached and grouped crystals of *selentic*. Some of the materials referred to in this and the preceding paragraph promise to furnish important agricultural resources to the county.

In my report of the Geological Survey of Maryland during the year 1835, I called the attention of the people of Kent county to the occurrence within their limits, of the *greensand*, so extensively used in New Jersey as a manure, and of another mineral deposit designated as the micaceous black sand, which from its composition it was supposed would likewise prove beneficial when applied to the soil. Directions were left with those interested, as to the probable best mode of employing them; and although these directions have been attended to only in a few instances, enough has been obtained to satisfy me that my anticipations of their value have not been disappointed. The following are the most satisfactory experiments hitherto made in Kent county, both with the *greensand* and the micaceous black sand, which latter I shall hereafter designate as the *black marl*.

At the head of Sassafras a deposit of pure *greensand* occurs which has been used with complete success on oats and buckwheat; but I am sorry to be obliged to express my regret that the experiment was not carried out with that zeal and attention, which the subject merited, which the intelligence of the proprietor had led me to expect, and which his interests ought to have urged. The received account of it leads me to believe, that about ten loads of ten to twelve bushels were applied to the acre, on part of a field in preparation for corn. The ensuing crop did not appear to be in any degree benefitted by the application. It was succeeded by oats, which were fully twenty per cent. better where the *greensand* had been used than elsewhere. But a much more satisfactory experiment was made upon a lot of ground prepared for buckwheat. The *greensand*, to an amount not determined, was applied to a land about eight feet in breadth and fifty in length, and was well intermixed with the soil previous to the seeding of the grain. This spot was visited on the 10th day of July. The buckwheat was then just coming out of the ground, and nothing could be more satisfactory. On the land the growth was at least doubled in size and in quantity, and the extent as well as termination of the *marled* portion could as readily be traced as might be the walks and beds of a flower-garden. To render the effects of the *greensand* still more apparent, the experimenter had caused a load of it to be dropped in the centre of the unmarled portion,

which contrasted as strongly with the surrounding parts, where there was but a scanty growth. What the ultimate result of the experiment was has not been learned.

Other less conclusive experiments were made with the mixed greensand, all of which gave promise that even in its impure state, it would prove advantageous. In one instance mixed sand that had been indicated as occurring at the head of Morgan's creek, in the vicinity of Mr. Uri's mills, was applied to a portion of a cornfield most successfully, having proved, to use the gentleman's own expressions "as good as ashes." Mr. George S. Holliday has likewise made trial of a ferruginous sand containing a few green particles, and the result was that no good effects were apparent upon the wheat, whilst the clover seemed to have received some benefit. This gentleman having since discovered a much purer article within his own premises proposes to use it extensively, and as the soil of his farm is generally stiff, there can be no doubt that it will prove serviceable. Mr. Jeremiah Nicols, at the extreme end of Quaker Neck, used small quantities of the mixed sand in alternating rows of corn, the sand having been applied to the hills, and was of opinion in the early stage of the growth that there was a marked difference for the better wherever the sand had been added. Small quantities of the sand, in various states of purity, have been used in garden beds, and as reported, in all cases to have accelerated and improved the vegetation.

To be Continued.

If man would but reflect how much he, above all others of the animal creation, owes to the Creator, the giver of all good, we would have an enlarged security for moral honesty as well as for religious rectitude.

The following little Poem, by Mary Howit, goes to impress the mind strongly with a sense of our obligation to a Divinity which provides not only to our wants, but administers so largely even to our pleasures.—*Lansingburgh:*

THE USE OF FLOWERS.

God might have made the earth bring forth,
Enough for great and small—
The oak tree and the cedar tree,
Without a flower at all.

He might have made enough, enough,
For every want of ours,—
For luxury, medicine, and toil,
And yet have made no flowers.

The ore, within the mountain mine,
Requireth none to grow,
Nor does it need the Lotus flower
To make the river flow.

The clouds might give abundant rain,
The mighty dews might fall,
And herb, that keepeth life in man,
Might yet have crunk them all.

Then wherefore, wherefore were they made,
All dyed with rainbow light,
All fashioned with supremest grace,
Up springing day and night:

Springing in valleys green and lo,
And in the mountains high,
And in the silent wilderness,
Where no man passes by?

Our outward life requires them not,
Then wherefore had they birth?
To minister delight to man,
To beautify the earth:

To comfort man—to whisper hope,
When'er his face is dim,
For who so careth for the flowers,
Will care much more for him!

THE AMERICAN FARMER.

The proprietors of this paper have a few complete sets of this work on hand, which they will dispose of at the reduced price of \$50 a set.—They are half bound and comprise each 15 volumes. The American Farmer, it will be recollected, was the pioneer in agricultural improvement in this country, being established in 1819, by John S. Skinner, Esq., to whose talents and industry its pages are indebted for, perhaps, the most valuable collection of agricultural matter to be found in any work extant. Those who desire to possess themselves of this valuable work will make early application as the number for sale is very limited.

SALE OF EXTRA STOCK.

TO be sold by Public Sale at Carrollton Hall, on Elkridge, the Farm of John Mactavish, Esq., seven miles from Ellicott's Mills, on Tuesday the 29th of May 1838.—viz.

- 10 Milch cows from 3 to 7 years old,
- 4 Steers 2 years old,
- 2 Bul's 1 year old, nearly full Durham.
- 2 Steers 1 year old,
- 3 Heifers 1 year old.

With the exception of a few of the Milch Cows, the whole of the above stock are the get of "Young Malcolm," the finest Improved Short Horn Bull in Maryland—and are from $\frac{1}{4}$ to $\frac{7}{8}$ Blood.

Will be sold at the same time, 2 young Boars—one a full bred Russian, Sale to commence at 10 A. M.

Terms Cash, or Notes at six months with approved Security and Interest.

may 12 JOHN MACKENZIE, Manager.

NEW BALTIMORE SEED STORE.

THE Subscriber having located himself in Grant street, near Pratt, three doors in the rear of Dinsmore & Kyle's Grocery Store, takes this early method of informing his friends and the public, that he has commenced the GARDEN AND FIELD SEED BUSINESS, and solicits a portion of public patronage. He has on hand and intends keeping, at all times, a constant and general assortment of the very best FIELD AND GARDEN SEEDS, a part of the latter, being of the last year's importation, and all the growth of 1837.

Also GARDEN AND FARMING TOOLS, of various kinds; a few barrels of ITALIAN Spring WHEAT; BADEN CORN, raised, and carefully selected by Col. Mercer—DUTTON; MANDAN; SIOUX; AND EARLY SUGAR CORN; CLOVER; TIMOTHY, ORCHARD, & HERD'S GRASS SEEDS; BUCKWHEAT; OATS; MILLET, WHITE DUTCH CLOVER; LUCERNE; TREFOIL; SAINFOIN, ENGLISH RYE GRASS, &c. &c.

Farmers, Gardeners, Merchants, Captains of Vessels, and others, are invited to give him a call, as they can be supplied not only with Field and Garden Seeds of all kinds, but also with PLOUGHS; HARROWS; STRAW CUTTERS; CORN SHELLERS; WHEAT FANS, WHEAT CRADLES, &c. &c., together with all other kinds of useful implements of Husbandry, manufactured and kept constantly for sale by John T. Durdin & Co. at their Agricultural Store, also in Grant street. Orders for articles in the above line by mail or otherwise, shall be faithfully and punctually executed.

THOMAS DENNY,

Grant street, 3 doors in the rear of Dinsmore & Kyle's.

GROUND PLASTER OF PARIS,

Of superior quality, in bbls. on hand and for sale by
JONA. ELLICOTT & SONS,
may 8 31 south end of Patterson st.

ROBERT SINCLAIR, Jr. & CO.

Light street, near Pratt street Wharf,

OFFER FOR SALE, an extensive assortment of AGRICULTURAL and HORTICULTURAL IMPLEMENTS and SEEDS, comprising all that are required to stock the most extensive plantation. Particular attention is directed towards the manufacturing department, where the most competent workmen are employed and durable materials used.

The assortment of PLOUGHS is large and various, among which are the Double mould board, Sub-soil, Self-sharpening, Improved Davis, &c.

WHEAT FANS—Com. Dutch, Crank Shake, and Watkins' Patent.

CORN SHELLERS—For manual and horse power, warranted to shell 2 a 700 bushels of corn per day.

CORN AND COB CRUSHERS—For breaking the cob in suitable size for feeding stock.

CYLINDRICAL STRAW CUTTERS—of these there are several sizes. The late improvements made have rendered them the most perfect and effective Straw Cutters in the country.

THRASHING MACHINES and Horse Powers.

CULTIVATORS, for cultivating Corn, Tobacco, &c.

DRILL and SOWING MACHINES, for drilling vegetable and grass Seeds.

VEGETABLE CUTTERS, for slicing turnips, mangel wurtzel, pumpkins, &c.

HARROWS—Expanding, Com. Square and Diamond shape.

GREEN'S PATENT and common DUTCH STRAW CUTTERS.

ALSO,
Grain Cradles and Grass Sneaths, with warranted Scythes attached, Sickles, Scythe Stones, Grain and Hay Rakes, Hay and Manure Forks, with 2 a 6 prongs, Ox Yokes, Grubbing Hoes, Docking Irons, Ames' Spades and Shovels, cast steel Axes, Bramble Hooks, Hay Knives, Box, Pruning and Sheep Shears, Grass Hooks, Pruning Knives, Children's Spades, and various other Garden Tools.

Merchants wishing to purchase Ploughs and Castings to sell again, will find it to their interest to examine our stock, being the largest and most general assortment in this city, and for sale on liberal terms.

GARDEN & FIELD SEEDS—Just received from Europe, and from the Clairmont Seed Gardens near this city, an extensive assortment of Garden and European Field Seeds, warranted fresh and genuine, viz.

French Sugar Beet Seed, Mangel Wortzel, Ruta Baga, superior Beet and Radish Seeds, early and late Cabbage Seed, 30 kinds early and late Peas, bunch and pole Beans, Hybrid and other Turnip Seeds, Cauliflower and Broccoli; Scotch Kale, Parsnip, Carrot, Cucumber, Lettuce, Onion, Summer and winter Squash, Melons, Leek, Celery, Ockra, Salsafy Cress, superior assortment of Flower Seeds, Herb Seeds, &c. &c.

FIELD SEEDS—English and Italian Ray Grass, Trefoil, Burnet, St. Foin, Lucerne, white and red Clover, green and blue Grass, early Potatoes, Gama Grass Roots, Baden and Mercer Corn, Italian and Tuscany Wheat, Timothy, Herds and Orchard Grass, Millet, &c.

TREES AND PLANTS supplied at the shortest notice from the Clairmont Nurseries, near this city.

Wanted, prime lots Seed, Grain and Grass Seed.

DAHLIA ROOTS.

The subscriber can furnish any quantity of DAHLIA ROOTS to the number of one thousand, recommended to be a choice variety, all of the double kind, and from the well known nursery of Samuel Reavs, Esq'r. near Salem, New Jersey. I can also furnish from the same nursery very superior APPLE TREES for spring planting, if orders are given in soon for them. Peach Trees cannot be furnished from the said nursery before next fall.

J. S. EASTMAN.

Printing, executed at the Farmer & Gardener, at short notice.

CONTENTS OF THIS NUMBER.

Notice of the Geological survey of Maryland—hint to plant pumpkin, mangel wortzel, sugar beet and water melon seeds—poudrette—a gentle hint—cultivation of artichokes and beans—propagation of the Dahlia—culture of the mignonette—on the swarming of bees—the sugar maple—culture of water melons—do. of onions—ploughing and ploughs—geological survey of Maryland—poetry, the use of flowers—prices current—advertisements.

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every MONDAY

	PER	FROM	TO
BEANS, white field,	bushel.	1 00	
CATTLE, on the hoof,	100lbs	9 00	10 00
CORN, yellow	bushel	70	71
White,	"	69	71
COTTON, Virginia,	pound	9	11
North Carolina,	"	10	11
Upland,	"	9 1/2	11
Louisiana ——— Alabama	"	11	12
FEATHERS,	pound.	48	50
FLAXSEED,	bushel.	1 25	dull.
FLOUR & MEAL—Best wh. wh't fam.	barrel.	10 00	10 50
Do. do. baker's.....	"	—	—
SuperHow. st. from stores	"	7 75	7 87
" wagon price,	"	7 25	—
City Mills, super.....	"	7 75	—
" extra	"	8 00	—
Susquehanna,	"	7 75	—
Rye,	"	4 50	—
Kiln-dried Meal, in hhd.	hhd.	18 00	—
do. in bbls.	bbl.	3 50	—
GRASS SEEDS, wholes. red Clover,	bushel.	8 00	8 50
Kentucky blue	"	2 50	3 00
Timothy (herds of the north)	"	3 00	3 50
Orchard,	"	2 50	3 00
Tall meadow Oat,	"	—	3 00
Herds, or red top,	"	1 00	1 25
HAY, in bulk,	ton.	12 00	15 00
HEMF, country, dew rotted,	pound.	6	7
" water rotted,	"	7	8
HOGS, on the hoof,	100lb.	7 00	7 50
Slaughtered,	"	—	—
HOPS—first sort,	pound.	9	—
second,	"	7	—
refuse,	"	5	—
LIME,	bushel.	32	35
MUSTARD SEED, Domestic, —; blk.	"	3 50	4 00
OATS,	"	32	33
PEAS, red eye,	bushel.	—	1 12
Black eye,	"	1 00	1 12
Lady,	"	1 00	—
PLASTER PARIS, in the stone, cargo,	ton.	3 50	—
Ground,	barrel.	1 50	—
PALMA CHRISTA BEAN,	bushel.	—	—
RAGS,	pound.	3	4
RYE,	bushel.	85	90
Susquehanna,	"	—	none
TOBACCO, crop, common,	100lbs	3 00	3 50
" brown and red,	"	4 00	6 00
" fine red,	"	8 00	10 00
" wrappery, suitable	"	—	—
for segars,	"	10 00	20 00
" yellow and red,	"	8 00	10 00
" good yellow,	"	8 00	12 00
" fine yellow,	"	12 00	16 00
Seconds, as in quality, ..	"	—	—
" ground leaf,	"	—	—
Virginia,	"	4 50	6 00
Rappahannock,	"	—	—
Kentucky,	"	5 00	8 00
WHEAT, white,	bushel.	—	—
Red, best	"	1 70	1 75
Maryland inferior	"	—	—
WHISKY, 1st pf. in bbls.	gallon.	33	34
" in hhd.	"	31	—
" wagon price,	"	—	30
WAGON FREIGHTS, to Pittsburgh,	100lbs	1 51	—
To Wheeling,	"	1 75	—
WOOL, Prime & Saxon Fleeces, ...	pound.	40 to 50	20 22
Full Merino,	"	35 40	18 20
Three fourths Merino,	"	30 35	16 20
One half do.	"	25 30	18 20
Common & one fourth Meri.	"	25 30	18 20
Pulled,	"	28 30	18 20

MORUS MULTICAULIS TREES.

The subscriber has from 25,000, to 30,000 Morus Multicaulis trees now growing at his residence, with roots of 1, 2, and 3 years old, which will be ready for sale this all, and which he will sell on moderate terms.

EDWARD P. ROBERTS.

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,	barrel.	—	—
BACON, hams, new, Balt. cured...	pound.	12 1/2	13
Shoulders, do.	"	11	—
Middlings, do.	"	11	—
Assorted, country,	"	8 1/2	9 1/2
BUTTER, printed, in lbs. & half lbs.	"	20	25
Roll,	"	—	—
CIDER,	barrel.	—	—
CALVES, three to six weeks old...	each.	5 00	6 00
COWS, new milch,	"	30 00	40 00
Dry,	"	9 00	12 00
CORN MEAL, for family use,	100lbs.	1 62	—
CHOP RYE,	"	1 50	1 62
EGGS,	dozen.	12 1/2	—
FISH, Shad, No. 1, Susquehanna,	barrel.	8 75	—
No. 2,	"	8 25	—
Herrings, salted, No. 1,	"	3 75	—
Mackerel, No. 1, ——— No. 2	"	10 00	12 00
No. 3,	"	—	—
Cod, salted,	cwt.	3 00	3 25
LARD,	pound.	9	10

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

U. S. Bank,	par	VIRGINIA.
Branch at Baltimore,	do	Farmers Bank of Virgi.
Other Branches,	do	Bank of Virginia,
MARYLAND.		Branch at Fredericksburg,
Banks in Baltimore,	par	Petersburg,
Hagerstown,	3a	Norfolk,
Frederick,	do	Winchester,
Westminster,	do	Lynchburg,
Farmers' Bank of Mary'd, do	do	Danville,
Do. payable at Easton,	do	Bank of Valley, Winch.
Salisbury, 1 per ct. dis.	par	Branch at Romney, ...
Cumberland,	par	Do. Charlestown, ...
Millington,	do	Do. Leesburg, ...
DISTRICT.		Wheeling Banks,
Washington,	do	Ohio Banks, generally 3 1/4
Georgetown, } Banks, 1p.c.		New Jersey Banks gen.
Alexandria,		New York City,
PENNSYLVANIA.		New York State,
Philadelphia,	par	Massachusetts,
Chambersburg,	3	Connecticut,
Getysburg,	do	New Hampshire,
Pittsburg,	2 1/2	Maine,
York,	1	Rhode Island,
Other Pennsylvania Bks. 2		North Carolina,
Delaware [under \$5]	4	South Carolina,
Do. [over 5]	1 1/2	Georgia,
Michigan Banks,	10	New Orleans,
Canadian do.	10	

TO THE PUBLIC.

Try the New Agricultural Establishment in Grant-street, next door to Dinsmore and Kyle.

Every article warranted to be first rate. The subscribers, grateful for past favors, take this early opportunity of returning their thanks to their customers and the public in general, and beg leave to inform them that they are now provided with a very extensive stock of newly manufactured AGRICULTURAL IMPLEMENTS, suitable to meet the call of Farmers, Gardeners, Merchants, Captains of vessels, and others, viz: 1000 Ploughs, assorted sizes, from \$4 to \$15 each, comprising of the old common Bar Shear, Winand's Self Sharpener; Woods & Freeborn's patent, all sizes, "Davis," "Sinclair & Moore's" improved Hill Side Ploughs, highly esteemed for turning the furrow down hill, with wrought or cast shears; Wheat Fans, of various sizes and patterns, from \$15 to \$50 each, warranted to separate the garlic from the wheat; Corn Shellers, from \$12 to \$20; Cutting Boxes, from \$7 to \$50 each; Corn and Tobacco Cultivators, large and small; Expanding do., Wheat Cradles, warranted to have fingers of the natural growth, and Grass Seythes, &c. &c.; Castings, of all descriptions and patterns, by the lb. or ton, to suit customers, allowing a liberal discount to merchants buying to sell again—fnala which will be furnished on the most pleasing terms I od every article warranted to be of the best quality, in

proportion to the cost price. All orders by mail or otherwise shall be duly attended to with the greatest despatch.

We would particularly call the attention of Country Merchants and others, wishing to purchase agricultural implements to sell again, to the fact, that we will furnish them with articles on better terms than they can be supplied at any other establishment in the city. Our assortment is complete and as varied as that of the most extensive concern in Baltimore.

We have also connected in its operations with the above branch of business a complete assortment of FIELD AND GARDEN SEEDS, kept by Thomas Denny—Also Garden and Farm Tools, of various sorts and of the choicest collection, which will enable our customers to have filled entire all orders in the Agricultural and Seed Departments. mh 26 JOHN T. DURDING & Co.

SUPERB DOUBLE DAHLIAS.

ALSO, GARDEN AND FLOWER SEEDS.

The subscriber offers for sale at his establishment the best collection of Double DAHLIAS offered to the public, and will warrant every root true to name and colour, but they are too well known to need any comment in their favor, as most all amateurs in the vicinity have seen them in bloom to their great satisfaction, so those who wish to have roots that are genuine, apply at the right place, and lower than any other in the city as to quality.

Besides he offers a general and good collection of Garden and Flower SEEDS, fresh imported, that cannot be raised to perfection in this country; he has selected from Europe, and will dispose of them on reasonable terms, with a general collection of Greenhouse, Herbaceous and hardy plants, also Bulbous Roots. Catalogues can be had at his establishment, corner of Pine and Lexington street, Baltimore, by

JOHN FEAST,
Florist & Seedsman.

ap 24 3t*

FARMERS' REPOSITORY

OF AGRICULTURAL IMPLEMENTS AND EASTMAN'S CYLINDRICAL STRAW CUTTERS IMPROVED.

THE Subscriber informs the public that he has secured by letters patent his late and very important improvements on his Cylindrical Straw Cutter, by which improvements they are made more durable and easier kept in order. All the machinery being secured to an iron frame the shrinkage, wear and decay of wood is avoided. The feeding part of his improved machine is upon an entire different principle from the former machine; far more durable, requiring neither skill or care to keep it in order. These machines are so constructed as to make the freight on them less than half what it cost to ship the former or wood machines, an important desideratum to purchasers living at a distance; and I now offer it to the public upon the credit of my establishment as the most perfect machine in existence for the same purpose. They are also adapted to cutting rags for paper making, and for cutting tobacco as manufactured by Tobaccoists, &c.

I also keep these machines on hand made as heretofore with my new feeding machinery attached to them; and also a general assortment of Agricultural Implements, as usual. Elliott's Horizontal Wheat Fans, and Fox & Bolland's Threshing Machines are both superior articles.

My stock of Ploughs on hand are not equalled in this city either for quality, quantity, or variety. I have a large assortment of Plough Castings at retail or by the ton, and having an Iron Foundry attached to my establishment can furnish any kind of Plough or Machine Castings on reasonable terms and at a short notice.

All repairs done with punctuality and neatness. On hand, a few Patent Lime Spreaders, Horse Powers, &c. &c.

Also just received, a fresh supply of Landreth's superior Garden Seeds. In store, superior Timothy and Orchard Grass Seed and Seed Oats. All implements in the agricultural line will be furnished by the subscriber, as good and on as reasonable terms as can be had in this city, with a liberal deduction to wholesale purchasers. Likewise will receive orders for Fruit Trees from Mr. S. Reeves' Nursery, New Jersey.

JONATHAN S. EASTMAN,
Pratt street, Baltimore,
Between Charles & Hanover sts

feb 20

A NEW-FOUNDLAND SLUT.

For sale, a large size New Foundland Slut, of large size and very handsome. Her color is black. She is thoroughly broken to the gun, and in pup to a bull dog; price \$20. Enquire of the editor of the Farmer and Gardener, Baltimore, Md.

ap 17

THE FARMER & GARDENER

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, E. P. ROBERTS AND SAMUEL SANDS—EDITED BY E. P. ROBERTS.

No. 5.

BALTIMORE, MD. MAY 29, 1838.

Vol. V.

THIS publication is the successor of the late
AMERICAN FARMER,

and is published at the office, at the N. W. corner of Baltimore and North streets, over the Patriot office, at two DOLLARS AND FIFTY CENTS per annum, if paid within one month from the time of subscribing, or \$3 if after that time. All letters to be post paid.

BALTIMORE: TUESDAY, MAY 29, 1838.

We continue the interesting report of Prof. Ducatel, the State Geologist, and commend it to our readers.

We refer our readers to the interesting letter of our esteemed correspondent, Samuel Canby, Esq., of Delaware, on the product of his Durham cows. Such exhibits of facts are eminently serviceable, as they go to establish the just claims of this noble race to public favor. The proprietor of these fine animals deserves all praise for his public spirit and enterprise, being among the first gentlemen in that State who nobly stepped forward with their means to improve the stock of native cattle.

DURHAM STOCK AND LEICESTER SHEEP.

Mr. Alexander S. Matthews, of ——— county, Va., recently bought in our vicinity, three grade Durhams, which are represented to us as being fine animals, by an individual altogether competent to decide upon the merits of this generous strain of cattle. He also bought of Mr. Hy. Shepherd, near Shepherdstown, Va. one ram, two ewes and two lambs of the Leicester breed of sheep. These latter animals are out of those fine Sheep imported by Mr. Rezin D. Shepherd from England, of whose fine appearance we spoke in a former volume. It is to us a most gratifying source of reflection to see our country gentlemen, thus spiritedly using the means with which it has pleased Providence to bless them, in objects so ennobling as this. Than the improvement of our domestic animals, we know of no object more valuable to the country, except that of improving our lands; and we look to this good example of Mr. Matthews to exert an influence in his county, the good effects of which will be permanently felt; and as we are always glad to see benefits as wide-spread as possible, we hope that Mr. M. will let out the services of his noble Ram, so that his

neighbors may be advantaged by his laudable effort to advance the interests of the husbandman.

We again have to request our distant subscribers to remit us by mail the amounts severally due by them. We are aware of the difficulty which our subscribers labor under of getting convertible money to send us; but as it is but fair that debtor and creditor should bear the burthens of the present oppressive times, and there seems to be no present prospect of relief, we would suggest in a spirit of perfect fairness, whether it is not better that those who are indebted to us should give themselves a little trouble to get the proper funds to send us than that we should go unpaid. Many owe two, three and four years, making an aggregate of several thousand dollars; for all who owe us over two years, we have paid in advance to the former proprietors, thereby manifesting a *confidence*, which we think gives us additional claims upon our patrons.

We have heard, within the present month, of two instances, in which the hot and green houses of gentlemen owning places in the vicinity of Baltimore, have been violently entered by hordes of lawless individuals from this city, and despoiled of their most valued treasures. Robberies of orchards, gardens and green-houses, of late years, have been so often repeated, that it appears to us to call for some enactment to render such offences felonious acts. In a moral point of view, there is no difference between stealing a horse, and taking the property which may be growing on an individual's premises; the right of possession, in either case, is invaded and trampled under foot by the act of taking off. But such is the *unwise, immoral, and unjust* discrimination of the law, that a man may enter another's corn-field, and if the ears be on the stalks, may take off the entire crop, and go scot-free, so far as punishment is concerned; for although a man's living, for himself and family for the coming year, may have been taken away by force and violence, the law proclaims it *not* to be an act of *felony*, but merely one of *trespass*—not such an act as is punishable; but one for which an action of da-

mages may be instituted and sustained. And we would ask, what damages can be obtained from men of the character of those who plunder orchards, gardens and corn fields? None; for though you might get a thousand verdicts, they would all prove nugatory, as the labor of calling "spirits from the vasty deep" would prove quite as profitable as the collection of such judgments. Let us look at the subject coolly and calmly. A man goes into a corn-field, and robs it of a hundred barrels of corn, valued at three hundred dollars; he is found out, the fact is proved against him, but a criminal action will not lay against him, because the ears of corn were on the stalks. —The same man goes into another field, here he finds the corn already *pulled* to his hand, and he carries off a single bushel—here is a most heinous offence, and the law sentences him to the Penitentiary; for the *unjust* discrimination of the law holds, that *no felony* can be consummated where an article is growing, with the solitary exception made in behalf of *Tobacco*, the most *abused* and *favoured* of all plants. To take a *growing* plant of tobacco, a thing which all can do without, is *theft*—to steal corn, wheat, rye or any other vegetable thing necessary to sustain human life, is *no theft*. The fact is, the law is absurd, partial and unjust. All the productions of the soil, as well as those of the forest should be protected, whether *growing, gathered, or felled*; tobacco as well as corn; but there should be no one article *exclusively* protected; all laws, tending to restrain depredations upon human rights, to be *just*, should be *general*. And above all, the law should never throw its panoply around the dishonest to shield him from punishment. As the law now stands, it offers a positive inducement to the dissolute and immoral—to the idle and the worthless, to prey upon the property of the honest and industrious. In fine, were the State to grant bounties for the promotion of such objects, she could not more effectually encourage acts of *moral felony*, than is done through the folly of her present *discrimination*.

Large Pigs.—Samuel Demond, Jr., of Rutland, raised and fattened two pigs, which were killed March 19, aged eleven and a half months, and weighed 359 and 335 lbs. Total, 694 lbs.

MORUS MULTICAULIS.

Copy of a letter from Jos. W. Atkinson, Esq. of North Carolina, to Wm Prince and Sons, proprietors of the Nurseries at Flushing, dated January 11th, 1838; transmitted to the editor of the Farmer and Gardener for publication.—

Gentlemen—Yours of 26th December, requesting me to make you acquainted with my success with the *Morus Multicaulis* is before me.

The 2000 plants purchased from you in Nov. 1836, were set out in April, 1837, in ordinary soil, from which we have about 10,000 plants of from five to six feet high. We have another nursery, the soil of which is *richer* than the one we set the plants in we purchased from you. The plants in this nursery are from seven to nine feet high. Our trees are standing in the nurseries without any protection, and have not received any injury from the frost, with the exception of a few buds near the end of the limbs, which did not have time to ripen. *Experience has established* the following facts, touching the growing of the *Morus Multicaulis* in North Carolina. That either from layers or cuttings they will reach a height of from 5 to 9 feet in one summer, agreeable to the quality of the soil. That it is not necessary to move them from the nursery, nor to protect them in any way during winter. That those planted in a richer soil may be slightly injured by the frost in consequence of their growing later in the fall, while those planted in a poorer soil will mature sooner, and receive no injury. That any person desirous of raising the *Morus Multicaulis* for the purpose of feeding the silk worm, may, from a small quantity of cuttings, produce any quantity that they may stand in need of, in a few years, with as little attention as they could raise a crop of corn.

THE SILK CULTURE.

We take great pleasure in copying the following essay on this interesting subject from the *Ohio Farmer*. It is from the pen of A. S. Chew, Esq. a gentleman alike distinguished for his enlightened zeal, practical knowledge, and theoretical attainments.

We fully concur in opinion with those who place a high estimate on the production of silk, as an object of individual industry throughout the ranks of American farmers. It should be the farmer's firm determination—to buy nothing that he can produce—to produce every article of use in domestic economy, or in the arts, which will award him a liberal emolument for his time, expenses and labour. He should at all events make the determination—to buy less in amount than he had to sell—an inviolable maxim. By such a course, his march in the path of prosperity, and independence, will be progressive, and the attainment of high rural-enjoyment, and true domestic comfort will be substantial. By a reversed course his tribute to the merchant, the manufacturer, &c. will form a bond of pecuniary slavery, that will tarnish the brightness of his moral powers—confuse his intellectual operations—blast his prospect of success in business, and will finally become the winding sheet of all the joys that cheer the heart,

and nerve the arm of the prudent and the diligent man.

The same remarks will hold if applied to national policy. We pay an exorbitant tribute to the foreign merchant, and producer, for the single article of silk. This should not be. Facts have forcibly evinced, and experience is daily illustrating the demonstration, that this elegant article of domestic usefulness may be profitably furnished by the American culturist, and prepared by the American manufacturer. By an established conviction of the fact, we are prompted to make all laudable exertions to promote the culture of the mulberry, and illustrate the method of raising, feeding, and treating the silk worm. A. S. Chew, the editor of the *Ohio Farmer*, has for the last few years made the culture of the Mulberry, and production of silk his particular study, and objects of his personal attention. From what we have seen of his essays on these subjects, we believe that they will be perused with pleasure, and the valuable instructions they convey will be duly appreciated by all to whom they may be presented. We will therefore transfer his essays on the *Morus Multicaulis*, or Chinese Mulberry to our columns, that the readers of the Culturist may avail themselves of the rich results of his experience in the culture of this truly valuable plant.

MORUS MULTICAULIS.—“With the bare mention this plant is said to be highly prized and much cultivated by the descendants and disciples of Confucius, we will observe, it was first introduced into Europe by Monsier Perrottet, a travelling botanist from France, about twelve years since, and that it would seem from the published accounts to have been extensively cultivated in that country. From France it was introduced into the United States about ten years since, either by Dr. Felix Pascalis, or Mr. William Prince, or perhaps by both of those gentlemen; and it is found to be peculiarly adapted to the soil and climate of all portions of our wide-spread country. An opinion may be formed of the estimation in which it is held, when it is known that the millions of specimens of it which are now to be found in Europe and America, are all derived from two plants, introduced into France scarce twelve years since. It is believed that its introduction into this country was the commencement of a new agricultural era, the moral effects of which will at least be coeval with our existence as a nation.

A better opinion cannot be given of its peculiar value than will be found in the language of Mons. Perrottet, in the “Annals of Fromont.”

“Among the number of Mulberries now cultivated by the Chinese, for the education of silk worms, the *Morus Multicaulis* appears to be the most esteemed of all, not only for the facility with which it is propagated and grows, but still more for the essentially nutritive property which the leaves possess. We have been enabled to verify this important fact during the five years which we passed in Senegal. * * * The characters which essentially distinguish this mulberry from other varieties, are those which result, 1st, from the remarkable property which the roots possess of throwing up small, flexible stalks, without forming a principal trunk; 2d, from the remarkable development which the thin tender and soft leaves steadily acquire, and the promptitude with which they are renewed.” * * *

If it is proposed to make a nursery of young plants, the beginner should provide himself with seeds, or cuttings, or plants for layering. The seeds of this variety are very rare in this country, and the purchaser is so liable to disappointment from the tricks and knavery both of foreign and domestic dealers, that it is not advisable to rely on them alone, and it is doubtful whether this should be done, even though one is possessed of seeds which he knows to be genuine. Seeds have been sold in this country by respectable men, at enormous prices, warranted to be genuine, which have proved to be inferior varieties of the mulberry. In other cases they have never germinated, and in other cases they have produced cabbages and turnips, as was the case with a lot once planted by ourselves. Added to these objections, it is supposed with much appearance of truth, that this variety has been much modified by the peculiar culture given to it in foreign countries, and it is doubted therefore whether the variety is produced genuine from the seeds. Some of our plants produced fruit last season, and we have a few seeds carefully preserved which perhaps will enable us to test the question to our own satisfaction at least. But even supposing seeds known to be genuine could be procured, and that from the seeds the genuine variety could be obtained, it is doubted whether plants can be produced with the same facility and rapidity as they may with cuttings and layers.

The seeds should be soaked in water from 24 to 36 hours, kept at blood heat—then rolled in ground plaster or dry ashes, and planted in rows in beds at the distance of two feet—the ground having first been well manured, dug deep, and finely pulverized. They should be kept free from weeds, and should be watered whenever from drought they may require it. If necessary they should be thinned out. They will, in a favorable season, grow about three feet high, and should be transferred to nursery beds the ensuing spring, where they have more air and room.

The method of raising from cuttings in nursery beds is with us a favorite plan. We manure, and throw up the beds lightly about 4 feet wide, by 50 or 100 feet long, like garden beds for vegetables. The cuttings of two or three buds each are inserted in the ground in a slanting direction, nearly its entire length, the earth being carefully pressed about them with the fingers.—The plants stand about ten inches apart, in rows which are two feet apart. When planted in this way, and kept free from weeds, they will grow from three to six feet in height the first season in this climate, and will be nearly one inch thick at the ground.

It is our practice to take them up in the fall, about the time the autumnal frosts are to be expected. We then put them in close heaps upright, with soil about their roots, under shelter of a temporary shed of boards or thatch, open at the ends and sides, where they remain until the close of Indian summer, when they are more effectually protected by placing them in cellars or in pits. As young plants from cuttings generally continue to grow until arrested by the frosts, the sap vessels being full, they are very liable to receive injury; but by placing them where they may be protected they have more time to ripen before winter comes upon them; and as these plants would necessarily be taken from the nursery beds

to transfer them to the plantation the ensuing spring, by taking up in the fall, the work of the succeeding year is anticipated; and putting them in cellars and in pits will be found to be but slight additional labor. After this they will ripen their wood each season, and will no longer require taking up—or they will be cut down near the ground, as is recommended by M. Perrottet and others, and as practised by us, and they are then safe, because the root in a dry soil is never injured. The tops so cut off may be secured in sand or moss in a cellar, or be buried to the depth of a foot in the ground in the field, and in the spring they are ready for new nurseries of cuttings.

Another way of increasing and propagating this plant is by *LAYERS*. We have practised two ways of doing this, which vary only as to the time of doing it, and they may both be followed in connection with the beds of cuttings.

First, by Spring layers. This is effected by taking a well-rooted plant, with a single straight stalk, and laying it horizontally in a furrow in the early part of April. The root is to be carefully covered with mould, say four inches deep, and the stalk from one to two inches. In the same furrow, at the head or crown of the first stalk so covered, lay the root of another plant, and cover the root and stalk as before. The whole furrow being completed, at the distance of six feet plant another furrow, and so on throughout the field. Keep the ground clean through the season. Many of the buds on each stalk will throw up shoots which will grow from four to eight feet high before autumn, and which will be an inch or more thick at the ground, and the wood will be fully ripe and mature. The stalk of this plant has also another kind of buds, those which produce the leaf and branches, which we call the *radicle* bud. It is perceivable in the shape of a small knob just below the leaflet bud, and this, when covered throws out a root. Besides these radical buds, the bark of the *Multicaulis* is covered with little brown spots, which are rough and perceptible to the naked eye. Each one of these also, when covered, sends out fibrous roots, and the whole stalk covered in the Spring, will be found to have been converted into a root, with thousands of fibres attached to it. In the fall uncover this root, and with a sharp knife or instrument, separate each shoot.—The root of the original plant may be preserved, and it will furnish an excellent stool for the next year's operations. This method of propagation will yield about ten fold increase. It is the best way to produce healthy, vigorous plants, which we have ever practiced, and is perhaps preferable to the method by cuttings. The labor of taking up and separating the plants in the fall is considerable. It is best done by two men, one on each side of the furrow, with spades, but this extra labor in the fall, is counterbalanced by the facility with which the planting is done in the spring.

The sugar beet will be cultivated this year to a considerable extent, not merely for the purpose of making sugar, but as food for animals. For the latter purpose it is equally good as the mangold wurtzel, and has this decided advantage over it—as a table beet it is delicious, being sweet and delicate in flavor, and altogether free from that earthy taste complained of by many.

BEST TIMBER FOR PUMP LOGS.

FRIEND TUCKER—It may be thought too aspiring by some, for an old man of 82 years of age to begin to write for newspaper inquirers, but seeing some inquiries and communications in several of the numbers of this year's *Genesee Farmer*, respecting the best method of conducting water in logs to the place desired, I would inform friend South-hill, as I have had some experience in conducting the water to my house from a distance, near forty years, in logs, the sort of timber I used, and the manner of laying the logs, in as concise a manner as I can, and the length of time they have been in operation, from actual experience. The timbers used were all poplar (or what is called the tulip tree,) except three logs, two of which were white oak, the other of chestnut—all green, with the bark on, of the size of from one foot to fifteen inches in the butt end, and not less than eight inches in the top end. They were bored with an auger of two and a quarter inches, and put together similar to a pump; but without any iron bands. They were put in a trench three feet deep, in the year 1797, the 8th mo. They answered every purpose I could expect, until 1830, at which time some of the joints began to leak. In the year 1835, I had them taken up, as they were not likely to convey a sufficient quantity of water. The distance from the spring house to the head of the spring, was 33 poles, and the descent three feet. The end of the pipe in the spring house was 18 inches higher than the rest, until within 3 or 4 poles of the spring head, for the purpose of keeping the air out, to prevent it from rotting. The logs were from fifteen to twenty-eight feet long. When taken up, it appeared that the deficiency was at the joints, the hole being worn to the size of four, and some five inches, which originally was but two and a quarter inches. A number of the joints were worn entirely through, the small end having been tapered to join them together. I had the pipes laid the second time, with timber similar to the first, one half new logs, the other half were of the best and largest of the old logs that had been in 38 years, and appeared to be in good condition.

I had them laid in a different manner; all the logs were cut square at the ends, and were joined together by a band or a ring of iron from seven to eight inches in the clear, three inches broad and one-eighth thick, sharpened at both edges and drove in between the ends of the logs so as to leave an opening between of half an inch, which was filled with slacked lime before covering, to prevent the iron from rust. In order to have the bands extend equally in both logs, I had a chisel made the same circle of the bands, three inches wide, and drove in each end of the log one inch, previous to putting them together.—There has not been the least appearance of any deficiency at this time.

A PENNSYLVANIA FARMER.

Wood Lawn, 4th mo. 10th, 1838. Gen. Far.

BEET SUGAR.

We have great pleasure in announcing to the agricultural public an important discovery, made by a gentleman in this vicinity, in the manufacture of sugar from Beets. It has been the result of ten years study and experiment. Samples of the sugar made by this process, finely crystallised and of as good a quality as the common Havana white sugar, and disinfected as far as we could perceive of any

of the earthy taste, which has been so strongly objected to in beet sugar, we have seen; and we have seen so much of the process and such results of the process as to leave little doubts of its success.

The advantages promised by this mode are the following:

1. It is adapted to obtain from the raw material eight or ten per cent. of sugar—or as much as it contains.

2. The raw material is put in a state of preservation so that the sugar can be manufactured at any season of the year, at the convenience of the Farmer.

3. The process is simple and easily understood.

4. It requires no expensive machinery, and though improved machinery would facilitate the process, yet it can be made to advantage with no other machinery than what is to be found in every farmer's kitchen.

5. At present prices of labor and sugar there is reason to believe that every farmer can raise and manufacture his own sugar at a very small expense compared with what the purchase of sugar from the stores now costs him.

A patent for this invention and discovery is now in the process of being procured; and it is confidently expected that rights to manufacture will be for sale at such a rate as to put it in the power of every industrious farmer to make his own sugar. The gentleman, who has applied for the patent, promises that the rights shall be for sale seasonably this summer. We express the hope therefore that the farmers in Massachusetts will be ready to take advantage of it by cultivating largely of the beet. In any event the value of the root for feeding stock will amply repay, if a good crop is obtained, the expenses of cultivation. We understand that sugar beet seed of the best quality is to be obtained at the New England Farmer Office, No. 52 North Market street, and we presume at other seed stores in the city. H. C.

April 30, 1838. New England Farmer.

ON THE GERMINATING OF SEEDS.

Seeds often fail to grow; and the seedsman is often faulted, for vending bad seeds, when the seeds are really good, and when the cause of their not growing is owing to the gardener or planter. To induce germination, moisture, atmospheric air, and a certain temperature, are indispensable; and it is also requisite that light be excluded from the seed, until the nutriment in the seed is exhausted, or until the root can draw nourishment from the soil. The first effect of the air, heat and moisture upon the seed is, to change its properties—to convert its starch into sugar—into a sort of milky pulp, the proper food of the embryo plant. If at this stage the seed become dry, its vitality is believed to be destroyed; but if these agents are permitted to exert their influence, the contents of the seed will swell by degrees, and the first point of the future root having formed, breaks through the shell in a downward direction, and about the same time the first point of the future stem comes forth in an upward direction. The presence of air, heat and moisture are as indispensable to the growth of the plant, as they are to the germination of the seed.

Now it often happens, that when seeds are planted in fresh stirred ground, or when the soil is moist, they undergo the incipient process of fer-

mentation, and the earth not being pressed upon them, and dry weather ensuing, the moisture is abstracted, and the seeds perish. Too much moisture is also often destructive to the vital principle of seeds—and others again are buried too deep to be vivified by solar and atmospheric influence. The first object in planting, therefore, should be to place the seed just so far under the surface, and so to cover it with earth, as shall barely secure to it a constant supply of moisture. There are many seeds, as of the carrot, parsnip, orchard grass, &c. which if not previously steeped, or the soil well pulverized and pressed upon them, fail to grow for want of moisture. Hence, in sowing orchard grass, it is found prudent to spread it upon a floor and sprinkle it with water, before it is sown, and to pass a roller over the ground after the seed is sown. And hence, in light garden mould, it is advisable to press, with the hoe or spade, the earth upon all light seeds after they are sown.

But we would draw the attention of the farmer, as well as of the gardener, to another mode of preventing failure and disappointment in the growth of certain seeds—and that is, by *sprouting* them before they are planted. This may be conveniently done with Indian corn, pumpkins, mangold wurtzel, beets, &c. on the farm, and with melons, cucumbers, beans, peppers, and a great number of other seeds which are assigned to the garden.

The mode of doing it with the field seeds we have named is this; steep the seed twelve or twenty hours in water of a tepid or warm temperature—then take off the water, and leave them in a warm place, covered to exclude the light and prevent their drying, or in a dark cellar or room, and the radicles or roots will shoot in a few days, and may then be planted without injury. Being obliged to suspend our planting for four days, on account of rain, we found our seed, which had been previously steeped, and set by in a dark room, with radicles two or three inches long. It was planted with but little inconvenience, and did remarkably well. Mr J. Nott sprouted a part of his corn last year, while a part of the seed was not sprouted—and what is worthy the particular notice of the farmer, he assures us that the sprouted corn was not injured by the wire worm, while the unsteeped seed was seriously injured, although planted by the side of each other. Mr Nott accounts for the difference in this way: The wire-worm attacks the chit and feeds upon and destroys the germ; but the radicles having protruded, and not being to the taste of the worm, the insect attacked the solid part of the kernel, where its progress was too slow, and too remote from the germ, to retard its growth. Mr. Nott also sprouted his mangold wurtzel seed, and planted it so late as the 27th June. Almost every seed grew, and the crop might be called a good one early in September.

To sprout garden seeds, procure two sods, of equal size, say eighteen inches square; lay one down in the corner of the kitchen chimney, grass down; lay your seeds upon it, if small wrap them in a piece of brown paper; then place the other sod upon them, grass up—water well with warm water, and the seeds will sprout in twenty-four to forty-eight hours.

There is one manifest advantage in sprouting seeds—it tests their goodness, and shows whether they will or will not grow. A small quantity of

seed corn, submitted to this test before planting, would in many instances prevent great loss to the farmer.—*Cultivator.*

[For the Farmer and Gardener.]

WOODSIDE, May 15, 1838.

Dear Sir—According to promise I send you a statement of the produce in milk and butter of my Short Horn Durham Heifer, *Blossom*. Her keep during the time was the same as my cows always get, and nothing more. The grass was short at the time, or I think she would have given more. She is three years old this summer, and was bred by Charles Henry Hall, Esqr. of New-York. I have a bull calf from her by Mr. Hall's *Comet*. I think it as fine an animal of its age (6 weeks) as I have ever seen.

Blossom was got by *Fox's Regent*, dam *Leonora*, (imported by Alderman Feris of New York,) by a son of *Lancaster*; grand dam out of *Elvira* by *Young Phenomenon*, by *Favorite*, &c.

Fox's Regent was got by the imported *Regent*, dam *Snow Drop*, begotten in England by *Fitz Favorite*, out of the celebrated cow *Blanche*.

Of *Leonora*, (the dam of *Blossom*,) Mr. Hall says, "*Leonora* is now in my possession; is a great and constant milker, and indeed one of the best cows I ever owned."

Blossom's milk was carefully measured at every milking, and kept entirely separate from the rest.

Statement of Blossom's milk for one week.

The 1st day she gave 16½ quarts; 2nd, 17½; 3d, 18½; 4th, 18½; 5th, 19½; 6th, 20½; 7th, 20. Total, 131 quarts, or within a fraction of 19 quarts per day. The above when churned made 10½ lbs. of as handsome butter as you ever saw, which is certainly pretty fair for a heifer with her first calf. You will perceive she was on the increase during the week we tried her. As a week has elapsed since, I had it measured again to day, when she gave 24 quarts, which for the week would give us 168 quarts, and in the same ratio as the other made 10½ lbs. butter, this would yield 13 lbs. per week.

I have also another Durham cow that yields 20 quarts per day, at the present time. Our imported bull *Maxwell* grows finely, and is the admiration of all who see him.

Respectfully yours,

S. CANBY.

GOOD DISCOVERY.

Some six or seven weeks ago, when the water of the Schuylkill was so yellow and turbid, and all the conduits from Fairmount ran discolored streams, the following discovery, which we find in the London Morning Chronicle, would have been a blessing, as it may always be henceforth. A Mr. James Richards, of Dumbleton, writing to the editor, observes: "I have discovered a cheap filter to cleanse river water, which you will oblige me to communicate to the public, as it may be useful to the inhabitants of London, Westminster, and other districts where clean soft water is preferred to dirty or hard water. It is nothing more than a bag made of unbleached calico, in the form of an inverted cone, attached to a small wooden hoop, and in this country called a dropping bag. It is first saturated with water, after-

wards pulverised charcoal is thinly spread over the inside of it with a dredging-box used by cooks. At first, a part of the charcoal will pass through the pores of the bag with the water, but by continuing to fill it full with the same water, and adding charcoal, in a few minutes it will become as clear as spring water.

To prevent the charcoal being washed from the pores of the bag in filling it, place another bag inside it, and dredge a small quantity of pulverized charcoal into it. The cost of both bags is under one shilling, and the two I send you will cleanse from 50 to 60 gallons daily, if it be supplied with water from a pipe and regulated by a stop-cock, and more in proportion to the size of the bag; but, as their cost is little, they can be increased in size and in number as may be required. I have used these filters the last month, and hope the use of them may add to the comfort of others. This plan, it will be seen, is extremely simple, and within the means of every citizen.—Why should it not be generally adopted in Philadelphia?—*Phil. Gaz.*

[From the Genesee Farmer.]

FIRE BLIGHT.

Mr. Tucker—I have this day noticed an article in your Farmer of the 31st ult. controverting my theory of the cause of the *Fire Blight*, by Mr. Lazell of Ohio. From the general tenor of his communication, I am quite satisfied that he is ignorant of the true blight, and that his trees died solely from the effects of cold; the consequences would be nearly alike in both cases. If a frost should destroy all the leaf buds after they were expanded and in full vigor of sap, there would be a strong exertion of vitality to renew them by pushing out new leaflets; and in all those cases in which there were few, and not a sufficient number to elaborate the ascending sap, a stagnation ensues, fermentation commences, the whole mass is vitiated, and the tree dies. This is all right, and according to the laws of necessity. Moreover, Mr. L's case is not a solitary one, and in no way varies from many other instances which occur from the destruction of the leaves by the canker-worm, the caterpillar, or any other case in which trees are denuded of their leaves.

Now, what are the facts with respect to the blight now known as a specific disease. It has prevailed through the whole Eastern states for the last twenty years, and so severe have its ravages been in the neighborhood of Boston, that many of the old and fine varieties are in danger of becoming extinct. For the information of those parts of the country where it does not prevail, I will here state the manner in which it commences. Some years some particular neighborhoods are more subject to it than others, but in no one year, for the last twenty, has one passed without my observing more or less of its ravages; which, I think, is conclusive, that severe frosts were not, and could not be, the sole cause of the disease. It commences in July, generally, and continues to affect trees during all the hot weather of summer; it commences at the end of a twig perhaps only six inches long, or it may first affect two or three feet; the leaves wilt, as though they were severed from the main branch; they immediately turn black, as does also the cambium, and shortly the whole wood, accompanied by a smell

precisely like green wood and leaves when scorched by fire, and from which it derives the name of *fire blight*; a whole branch is shortly affected, and finally the whole tree. It may be effectually stopped in its early stages, by cutting off the diseased branch down to some point where a healthy limb branches off. Its appearance is sudden, without any warning, and those who wish to preserve fine fruit where the disease prevails, must not rely upon *praying* to Hercules, but must *watch* also, and *act* promptly. It attacks the *Apple*, the *Quince*, and the *Pear*, exclusively as far as my observation goes. I am not *balky*, Mr. Editor, and I do not "*give it up*," from the case cited by Mr. L. I still assert, and most fully believe, that no tree was ever struck with the real *fire blight*, until it had arrived at the period and age of blossoming; and that no branch or twig was ever affected with it, except a decayed and diseased fruit, or its process was at its extremity. If it does, my theory falls to the ground, and I will back out so short that it shall be a *caution* to all speculative theorists hereafter. But if any person will show a well attested case to the contrary, I hereby engage to exhibit to him the secret and hidden arcana of nature, and the *modus operandi* by which she changes wheat into *chess*, which I think, is a disparity of information worth the attempting a pretty full and close observation of the disputed points.

PYRUS.

Littoria Farm, Greece, April 20, 1838.

[From the same.]

HOOF-AIL.

Mr. Tucker—Information relative to the Hoof Ail among neat cattle, which is prevailing to a considerable extent in different parts of our State, as to cause and remedy, has been sought for with some anxiety, especially by those who are sufferers. Various opinions have been formed respecting this distemper and the cause; which, if ascertained, may prevent the loss of many valuable cattle in future. Having taken much pains to get all the important information relative to the cause, as well by my own observation as by facts received from statements of other individuals living in different parts of the country, I am the more confirmed in the belief, and that beyond a doubt, that it is ergot, commonly called smut, which is produced on June or spear grass, looking like the same kind of substance produced on rye, only smaller in kernel. The last summer, more was discovered on this grass than has been before in this vicinity in about sixteen years; which fact has been ascertained by my own careful examination. There has not been a single case of this disease, to my knowledge, in this part of the country since the winter of 1821-2, the time alluded to above, till this present season. It is now prevailing in adjoining neighborhoods to this, to a considerable extent, where a remedy has been discovered, which has not failed to cure in every instance where it has been applied, unless the disease was too far advanced, in which case the cattle would be of but little use if cured.

I fully agree with a communication in the 8th No. of the present volume of your valuable paper, signed by Dan. Bradley of Marcellus, that the disease may be effectually prevented by not feeding hay containing ergot. Those who have June

grass in their meadows, may avoid this poisonous substance by letting it stand until about the time timothy and clover is ripe, when the ergot will fall off, and the hay can be made and fed to cattle without the fear of hoof-ail; in this way the disease has been prevented in this neighborhood.

So certain are many in this place, that ergot produced on June grass is the cause of this disease, that it is proverbially called slip hoof, which is as appropriate a name perhaps as shin plasters for small bills.

It is firmly believed by some, that from one to two pecks of salt thrown on a common load of hay, being made of one third June grass, containing as much ergot as last summer produced, when stored away, will prevent this dreadful distemper. Those that have been in the habit of sprinkling salt on their hay as above described, have not been subject to loss in any instance within my knowledge with the above named disease, and not very frequently with any other disease common among neat cattle.

Being more accustomed to handling the plough than the pen, you can account for this disconnected and unpolished communication; but being desirous to benefit my brother farmers in their agricultural pursuits, rather than preceptive learning; I have been prompted to forward this communication to you, with the following remedy for hoof ail, which was put into my hands a few days since, and by request I send it to you for publication.

ALLEN PALMER.

Five Corners, Genoa, Cay Co. April 23, 1838.

As there is at the present time prevailing among neat stock, to a considerable extent, a disease called hoof-ail, the subscriber, therefore, has been prompted from philanthropic motives for the good of others, to present to the public a sure and effectual antidote for this, *heretofore*, incurable disease. It is but recently that the subscriber has discovered this simple but valuable remedy, and he has thoroughly tested its efficacy, and the remedy as yet has proved effectual in every instance, when applied in season; therefore, he can with great confidence recommend it to the public. Dissolve salt in warm water until it becomes so thick that it will no longer dissolve, and when warm apply it to the parts affected. If the disease is of long continuance, salt should be given until it operates as physic.

WILLIAM H. PALMER.

Genoa, April 20, 1838.

CULTIVATION OF VEGETABLES.

From Reynolds & Bateham's Catalogue.

BORECOLE AND BRUSSELS SPROUTS.

The curled Borecole, or Scotch Kail, is a species of cabbage, with finely curled and fringed leaves. It is very hardy, and is cultivated in gardens for early greens, and in fields for sheep and cows.

The Brussels Sprouts have large wrinkled leaves, at the base of which are produced small heads or sprouts early in spring. This and the preceding should be sown and transplanted like winter cabbages, and at the commencement of winter, they may be taken up and put in a cellar, or if growing on dry sandy soil, they may be bent down and the tops nearly covered with earth, then slightly covered with litter. Early in spring they

should be planted out, or placed in their natural position, and they will produce an abundance of fine sprouts for greens.

BROCCOLI AND CAULIFLOWER.

These two plants of the cabbage tribe, so nearly resemble each other in some of their varieties, that it is difficult to decide as to which name they belong. The Cauliflower, and the Cape varieties of Broccoli, can be raised almost as readily as cabbages, and it would seem that nothing was wanting but a knowledge of their delicious qualities, to bring them into general cultivation.

European gardeners produce fine heads of Broccoli and Cauliflower at all times during the whole year. They sow the seed in September, to raise plants for early spring planting, but in this country the winters are so severe, that it is difficult to preserve the plants, and this course is not often adopted. The usual manner is to sow the seed in a hot bed in March or April, for early plants, and in the open ground in May, and transplant like cabbages, when the plants are of a sufficient size.

The soil for Broccoli and Cauliflower must be very rich and well manured. The plants when growing should be frequently hoed and watered occasionally in dry weather. Strong plants that do not head before severe frosts, will frequently produce fine heads in winter, if set in a cellar with the roots in sand or earth.

Much depends on the manner in which these vegetables are cooked; and their excellence is often destroyed by an ignorant or careless manner of preparing them for the table. The head or flower should be cut while it is close and firm; trim off the outside leaves, then wash it and tie it up in a clean linen cloth, and boil in plenty of water with a little salt, until a fork will readily enter the stem, which will be in fifteen or twenty minutes, then take it up, drain out the water, and serve with gravy or melted butter.

RHUBARB OR PIE PLANT.

This is a perennial, cultivated for its large leaf stalks, which are much esteemed for making tarts, pies, &c. early in spring. The seed vegetates best when sown in the fall, but will often do well if sown early in the spring, on rich mellow soil, not too dry. The young plants should be carefully watered in dry weather and shaded from very hot sun. When a year old they should be transplanted into deep rich soil about three feet apart. The leaves should not be cut until the plants are two years old.

SEA-KAIL.

This is a perennial plant of the cabbage tribe, and derives its name from the circumstance of its growing spontaneously by the sea-shore in Europe. It is cultivated for the young shoots which are produced early in the spring, and when blanched and rightly prepared are very delicious.

The seed is enclosed in a shell, which should be broken before sowing. It should be sown in the spring, and the plants transplanted when a year old, or the seed may be sown at once where they are to remain. The bed should be made very deep and rich, and the plants set about eighteen inches apart. They should not be cut before two years old. The bed should be covered in the fall with a good coat of manure, and early in the spring

when the plants begin to grow, this should be removed, and the crows of the plants covered with flower pots or boxes, so as to exclude the light, and blanch the young shoots; or the bed covered with six or eight inches of sand or gravel, and the shoots taken off below it as fast as they make their appearance.

To prepare Sea Kail for the table, it should be first soaked and washed; then thoroughly boiled, and served up like Asparagus.

BLUE GRASS.

This grass, which constitutes the glory of Kentucky pastures, is esteemed superior to all others for grazing. It flourishes only on calcareous soils. Opinions and practice vary here, as to the best time of sowing it—some preferring September for the same reasons, chiefly, which relate to timothy or other grasses, others preferring February or March, to obviate the danger of the tender roots being winter killed. It is sown either on woodland or open ground—in the latter case most generally after a succession of exhausting crops in old fields. If sown on woodland, the leaves, brush and trash must be raked off or burnt. It is particularly important to burn the leaves, else the seed may be blown away with them by the wind, or if not blown away, the leaves may prevent the seed reaching the earth, and thus defeat their germination. Many of those who sow in winter, prefer casting the seed on the snow, as it enables them to effect the operation with more neatness and uniformity. In woodlands, the grass must not be grazed the first year, or at all events, till after the seeds have matured. In open land, the practice has been adopted by some, of mixing timothy and clover with blue grass, in which case half a bushel of the latter seed to the acre is sufficient. The advantage resulting from this is, that it secures at once, a well covered pasture that will bear considerable grazing the first year. The blue grass, in a few years, expels the other grasses, and takes entire possession of the field. On open ground, it is frequently sown in March upon wheat, rye or oats. If the season is favorable, it may be sown in April; but should the weather prove dry, a great portion of the seed will be lost. It is the practice, we believe, of most graziers, to put upon a given pasture, as much stock as it will maintain, without shifting them during the season, as, besides saving labor, it renders the cattle more quiet and contented. Others, however, fence off their pastures into separate divisions, to undergo a regular succession of periodical grazings. This plan secures a constant supply of fresh grass, very grateful to the animals, and is believed to be more economical, as much less is trampled and rejected by the cattle. The number of animals to the acre must depend upon their size and the quality and quantity of grass. The grass on open ground is much more abundant, sweet and nutritious, than on woodland, and consequently will maintain much more stock, perhaps nearly twice as much; while open woodland will produce much more and better grass than that which is deeply shaded. The best graziers extirpate, as fast as possible, every tree not valuable for timber or wanted for fuel, and some even prune the branches of those which are allowed to remain. But we shall soon, we hope, be able to present this subject more at large, in some num-

bers which are preparing, on the grazing and stock feeding systems of Kentucky, which we trust will prove interesting to all our readers and particularly instructive to the farmers in the southern portion of the state and Tennessee. Although we wish well to the tobacco growers on Green river, and would lend our aid to promote their particular interests in that pursuit, we wish they could be persuaded to adopt in its stead, the grazing business; for we are confident it is a more productive and certainly a more agreeable and less laborious one.—*Franklin Farmer.*

Cure for Hydrophobia.—Although so many cures have been offered to the public for this appalling disease, most of which have been found ineffectual, we are nevertheless emboldened to lay before our readers the following remedy, which as it comes fortified by proofs of actual and numerous cures, it is the most worthy of public notice. The receipt is as follows:—Take a quantity of oyster shells and burn them into lime, pulverise the lime till it becomes an impalpable powder; take three table spoonfuls of this powder and beat them up with three eggs; fry this in a common pan with sweet oil, and let the patient eat the cake when properly baked, in the morning fasting, taking care to take no victuals nor the least liquid of any kind for six hours after the dose has been taken. Repeat this dose for three mornings successively.

This remedy has been used among the French Canadians of this Province for many years; it is prescribed by the Priests frequently, and no instance of its failure is known, unless in patients, where the fits had made their appearance, before the exhibition of the medicine. We know of a family in the vicinity of St. Andrews, L. C. three of whom were bitten in endeavoring to drag a rabid dog from under a bed; the dog made his escape out of the house, and bit three of his master's cattle and some dogs. All the cattle and dogs bitten were seized with violent symptoms of Hydrophobia, and died or were killed; the three persons bitten took the medicine here described and escaped. —Another family had four of its members bitten; two of them, interesting young men, took hydrophobia and died; the other two after the death of their brothers heard of this remedy, took it, and never experienced the slightest symptoms of this horrible disease.

Persons desirous of learning the names of the parties above mentioned, and of hearing more cases of cure, can be satisfied on this point by calling at the Courant office.—*Canadian Courant.*

Agriculture was the first, and should ever be the most esteemed of all pursuits. How happy would it be for hundreds and thousands of our young men if they could be persuaded that a few acres of ground are a better capital than as many thousands of dollars procured by writing their names at the bottom of a negotiable note; and what years of misery might be saved if men would believe that a dollar actually earned by honorable and healthy labor as farmers and mechanics, is worth a hundred in prospect to be gained in trade and speculation.—*Farmer.*

Arrogance is a weed that grows mostly on a unghill.

GEOLOGICAL SURVEY OF MARYLAND. By PROFESSOR DUCATEL. SEC. I. Geological Examination of Kent Co. (CONTINUED.)

The first trials that were made with the *black marl* are those of Mr. Raisin Jones, at the head of Churn creek. The *micaceous black sand*, the composition of which was given in a former report, was in the first trial of it used fresh from the bank and liberally applied to a field in preparation for corn; it proved injurious, no doubt in consequence of the decomposition of the *pyrites* it contained, which must have given rise to the formation of *sulphuric acid*, under circumstances that prevented its immediate neutralization by the alkaline substances likewise contained in the sand. The same field in wheat the next year had sensibly improved. Used as a top dressing upon grass crops it was beneficial. Mr. Jones who has the greatest confidence in the efficacy of this material, now uses it by forming a compost with stable manure, and the rich earths collected from the fence-sides. In this form he has applied it to his cornlands in the proportion of about 150 bushels to the acre.

A deposit of a similar character with the one just referred to is found at the head of Lloyd's creek, on the farm of Mr. Ebenezer Blackstone. I visited this farm, in company with Dr. Peregrine Wroth on the 5th of June; the *marl* had been extracted from its bed during the preceding fall and exposed to the weather the whole winter, it was then applied, as an experiment, at the rate of 1-3d to 1 shovel full to each corn hill. The season was not sufficiently advanced to allow of any remarkable difference in the appearance of the growth on the marled and unmarled portions of the field; but the gentleman who accompanied me, and myself, as well as the proprietor, remained impressed with the belief that the corn on the marled portion, had decidedly a more healthful appearance, and we were informed that it had been entirely free from the worm, whilst the adjoining portion was as usually infested to a most provoking degree. Desirous of obtaining an account of the final result of this experiment, I wrote for information, which has been promptly and kindly furnished to me in the way of answers to the following interrogatories obtained through Dr. P. Wroth, of Chestertown, from Mr. E. Blackstone—

1st Query—When was the micaceous black sand applied and in what quantity?—*Answer.* During the latter part of April and through the month of May. Half a spade full to the corn-hill and wet as it came from the pit.

2d Query—Was any effect visible in the size and colour of the corn, and at what periods of its growth?—*Answer.* It looked green and thriving through the season. The blades partook of the injury sustained by my crop generally, in consequence of the cold weather in August.

3d Query—Did you ascertain by actual measurement any increase of the crop, when compared with the corn growing on land equally good but not marled?—*Answer.* I did not measure to ascertain the difference, but the crop, growing on that part of my field where the *marl* was used, was evidently much better than that where it was not used, and the corn eared well on poor hill-sides without any other manure.

4th Query—What is your opinion of the value of the micaceous black sand from the use you have made of it this year?—*Answer.* I am so much pleased with its effects that I intend applying it very extensively next year. I shall keep one cart running all the year, and two as often as I can. I am of opinion that my marl is superior to cow yard manure.

From these results there can be no doubt of the value of the *green sand* and *black marl*, as agricultural resources, which it would be folly any longer to neglect. The directions for the use of the green sand, where it occurs pure and intermixed with fossil shells, are to apply it liberally—say three hundred bushels to the acre. I would advise the use of the mixed green sand only on stiff soils, and three hundred bushels are then to be considered a moderate dressing. As regards the use of the *black marl*, more caution is required. In all cases perhaps—unless when it contains a large admixture of fossil shells—it is advisable to suffer it to remain exposed to the weather during one season, after which it may be applied to the soil without any risk. Twenty loads to the acre would probably not be found too much. A still more liberal use may be made of it in the farm-yard, where, as leisure and opportunities occur, it should be hauled and mixed with corn-stocks, husks, and, on the plan of Mr. Jones, with the earth collected from the fence-sides.—In this way it will assist in making an excellent compost, and a large quantity of manure may in one season be accumulated.

On a previous occasion I had advised the use of a material, consisting of disintegrated marine shells in sand, that occurs three miles below Chestertown, on the farm of Mr. Arthur Merrit, and of which a similar deposit is found near Melton Point on the farm of Mr. Barnard D'Corse. It has accordingly been used with entire success, especially on stiff soils.

The good use that may be made of the contents of the *Indian shell-banks*, tested as it has been by so many experiments, has been so frequently referred to in former reports, that they need being alluded to again only to express a regret that they are not more generally and abundantly distributed. It is only necessary to add, that no farmer who can procure the lime which they yield, at nine cents a bushel—the price at which it has hitherto sold,—ought for a moment to hesitate.

The materials described in the preceding pages occur in numerous localities throughout the country, where they have been indicated to those more immediately interested in their use, and are the only ones that are known to possess any value. On the farm of Mr. P. Wethered, near the mouth of Turner's creek, there is a deposit of coarse black sand, with impressions of shells, the lime of which has, probably by the decomposition of the *pyrites*, of which it contains nodules, been converted into *sulphate of lime*. This deposit is overlaid by a ferruginous sand, and rests upon a coarse, also highly ferruginous sand, beneath which there may possibly be found a bed of green sand. As the sulphate of lime exists but in a very small quantity in the sand above described, no very great hope of its proving valuable can be entertained, though it would certainly be proper to give it a trial. Some specimens of *bog-iron-ore* of good quality were obtained at the head of a

branch of Worton Creek, on the farm of Mr. Levy Wroth.

(To be Continued.)

Lucerne.—Those who feel disposed to try their fortune with this valuable grass, can do so as soon as the ground is relieved from the frost and dampness. It should be sown on a dry rich soil, which had been previously well cleaned.—From 16 to 20 quarts of seeds should be sown. It may be put in with the spring barley and oats. In England and Scotland it is frequently cut four times in a season.

FOR SALE,

Two superior DEVON bulls, 4 years old this spring, of the purest blood in the country, fine form and remarkably large. Any gentleman wishing to procure one will find it to his advantage to embrace the present opportunity, as they will be sold at the low price of \$100 each, deliverable in Baltimore.

Applications in writing, *post paid*, to be made to the subscriber.

EDWD. P. ROBERTS, Baltimore, Md.

may 29

3t

NEW BALTIMORE SEED STORE.

THE Subscriber having located himself in *Grant street*, near *Pratt*, three doors in the rear of *Dinsmore & Kyle's* Grocery Store, takes this early method of informing his friends and the public, that he has commenced the GARDEN AND FIELD SEED BUSINESS, and solicits a portion of public patronage. He has on hand and intends keeping, at all times, a constant and general assortment of the very best FIELD AND GARDEN SEEDS, a part of the latter, being of the last year's importation, and all the growth of 1837.

Also GARDEN AND FARMING TOOLS, of various kinds; a few barrels of ITALIAN Spring WHEAT; BADEN CORN, raised, and carefully selected by Col. Mercer—DUTTON; MANDAN; SIOUX; AND EARLY SUGAR CORN; CLOVER; TIMOTHY, ORCHARD, & HERD'S GRASS SEEDS; BUCKWHEAT; OATS; MILLET, WHITE DUTCH CLOVER; LUCERNE; TREFOIL; SAINFOIN, ENGLISH RYE GRASS, &c. &c.

Farmers, Gardeners, Merchants, Captains of Vessels, and others, are invited to give him a call, as they can be supplied not only with Field and Garden Seeds of all kinds, but also with PLOUGHS; HARROWS; STRAW CUTTERS; CORN SHELLERS; WHEAT FANS, WHEAT CRADLES, &c. &c., together with all other kinds of useful implements of Husbandry, manufactured and kept constantly for sale by John T. Durdin & Co. at their Agricultural Store, also in Grant street. Orders for articles in the above line by mail or otherwise, shall be faithfully and punctually executed.

THOMAS DENNY,

Grant street, 3 doors in the rear of Dinsmore & Kyle's.

GROUND PLASTER OF PARIS,

Of superior quality, in bbls. on hand and for sale by

JONA. ELLICOTT & SONS,

may 8 3t

south end of Patterson st.

THE AMERICAN FARMER.

The proprietors of this paper have a few complete sets of this work on hand, which they will dispose of at the reduced price of \$50 a set.—They are half bound and comprise each 15 volumes. The *American Farmer*, it will be recollected, was the *pioneer* in agricultural improvement in this country, being established in 1819, by John S. Skinner, Esq., to whose talents and industry its pages are indebted for, perhaps, the most valuable collection of agricultural matter to be found in any work extant. Those who desire to possess themselves of this valuable work will make early application as the number for sale is very limited.

ROBERT SINCLAIR, Jr. & CO.

Light street, near Pratt street Wharf,

OFFER FOR SALE, an extensive assortment of AGRICULTURAL and HORTICULTURAL IMPLEMENTS and SEEDS, comprising all that are required to stock the most extensive plantation. Particular attention is directed towards the manufacturing department, where the most competent workmen are employed and durable materials used.

The assortment of PLOUGHS is large and various, among which are the Double mould board, Sub-soil, Self-sharpening, Improved Davis, &c.

WHEAT FANS—Com. Dutch, Crank Shake, and Watkins' Patent.

CORN SHELLERS—For manual and horse power, warranted to shell 2 a 700 bushels of corn per day.

CORN AND COB CRUSHERS—For breaking the cob in suitable size for feeding stock.

CYLINDRICAL STRAW CUTTERS—of these there are several sizes. The late improvements made have rendered them the most perfect and effective Straw Cutters in the country.

THRASHING MACHINES and Horse Powers.

CULTIVATORS, for cultivating Corn, Tobacco, &c.

DRILL and SOWING MACHINES, for drilling vegetable and grass Seeds.

VEGETABLE CUTTERS, for slicing turnips, mangel wurtzel, pumpkins, &c.

HARROWS—Expanding, Corn Square and Diamond shape.

GREEN'S PATENT and common DUTCH STRAW CUTTERS.

ALSO,

Grain Cradles and Grass Sneathes, with warranted Scythes attached, Sickles, Scythe Stones, Grain and Hay Rakes, Hay and Manure Forks, with 2 a 6 prongs, Ox Yokes, Grubbing Hoes, Docking Irons, Ames' Spades and Shovels, cast steel Axes, Bramble Hooks, Hay Knives, Box, Pruning and Sheep Shears, Grass Hooks, Pruning Knives, Children's Spades, and various other Garden Tools.

Merchants wishing to purchase Ploughs and Castings to sell again, will find it to their interest to examine our stock, being the largest and most general assortment in this city, and for sale on liberal terms.

GARDEN & FIELD SEEDS—Just received from Europe, and from the Clairmont Seed Gardens near this city, an extensive assortment of Garden and European Field Seeds, warranted fresh and genuine, viz.

French Sugar Beet Seed, Mangle Wortzel, Ruta Baga, superior Beet and Radish Seeds, early and late Cabbage Seed, 30 kinds early and late Peas, bunch and pole Beans, Hybrid and other Turnip Seeds, Cauliflower and Broccoli; Scotch Kale, Parsnip, Carrot, Cucumber, Lettuce, Onion, Summer and winter Squash, Melons, Leek, Celery, Oekra, Salsafy Cress, superior assortment of Flower Seeds, Herb Seeds, etc. etc.

FIELD SEEDS—English and Italian Ray Grass, Trefoil, Burnet, St. Foin, Lucerne, white and red Clover, green and blue Grass, early Potatoes, Gama Grass Roots, Baden and Mercer Corn, Italian and Tuscan Wheat, Timothy, Herds and Orchard Grass, Millet, etc.

TREES AND PLANTS supplied at the shortest notice from the Clairmont Nurseries, near this city.

DAHLIA ROOTS.

The subscriber can furnish any quantity of DAHLIA ROOTS to the number of one thousand, recommended to be a choice variety, all of the double kind, and from the well known nursery of Samuel Reeves, Esq'r. near Salem, New Jersey. I can also furnish from the same nursery very superior APPLE TREES for spring planting, if orders are given in soon for them. Peach Trees cannot be furnished from the said nursery before next fall.

J. S. EASTMAN.

CONTENTS OF THIS NUMBER.

Notice of the state geologist's report—do. of Mr. Canby's Durham cows—do. of Durham stock and Leicester sheep—notice to subscribers—robberies of hot and green houses—large pigs—letter from Carolina on the morua multicaulis—the silk culture—sugar beet do—timber for pump logs—beet sugar—on the germination of seeds—process of Mr. Canby's cows—new method of filtering—fire blight—do. of hoof ail—cultivation of borecole and brussels sprouts, brocolli and cauliflower, rhubarb or pie plant, and sea-kail—Kentucky blue grass—cure for hydrophobia—agriculture the first of pursuits—geological survey of Maryland, continued—lucerne—prices of corn—adv. risements.

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every Monday

	PER	FROM	TO
BEANS, white field,	bushel.	1 00	
CATTLE, on the hoof,	100lbs	9 00	10 00
CORN, yellow	bushel.	70	72
White		69	70
COTTON, Virginia,	pound	9	11
North Carolina,	"	10	11
Upland,	"	9 1/2	11
Louisiana — Alabama	"	11	12
FEATHERS,	pound.	48	50
FLAXSEED,	bushel.	1 25	dull.
FLOUR & MEAL—Best wh. wh't fam.	barrel.	10 00	10 50
Do. do. baker's	"		
Superior, st. from stores	"	7 75	7 87
" wagon price,	"	7 25	
City Mills, super.	"	7 75	
" extra	"	8 00	
Susquehanna,	"	7 75	
Rye,	"	4 50	
Kiln-dried Meal, in hhds.	hhd.	18 00	
do. in bbls.	bbl.	3 50	
GRASS SEEDS, wholes. red Clover,	bushel.	10 00	11 00
Kentucky blue	"	2 50	3 00
Timothy (herds of the north)	"	2 50	3 00
Orchard,	"	2 00	2 50
Tall meadow Oat,	"		3 00
Herds, or red top,	"	1 00	1 25
HAY, in bulk,	ton.	12 00	16 00
HEMP, country, dew rotted,	pound.	6	7
" water rotted,	"	7	8
HOGS, on the hoof,	100lb.	6 75	7 00
Slaughtered,	"		
HOPS—first sort,	pound.	9	
second,	"	7	
refuse,	"	5	
LIME,	bushel.	32	35
MUSTARD SEED, Domestic, —; blk.	"	3 50	4 00
OATS,	"	32	33
PEAS, red eye,	bushel.		1 12
Black eye,	"	1 00	1 12
Lady,	"	1 00	
PLASTER PARIS, in the stone, cargo,	ton.	3 37	
Ground,	barrel.	1 50	
PALMA CHRISTA BEAN,	bushel.		
RAGS,	pound.	3	4
RYE,	bushel.	88	94
Susquehanna,	"		none
TOBACCO, crop, common,	100lbs	3 00	3 50
" brown and red,	"	4 00	6 00
" fine red,	"	8 00	10 00
" wrappery, suitable	"		
" for segars,	"	10 00	20 00
" yellow and red,	"	8 00	10 00
" good yellow,	"	8 00	12 00
" fine yellow,	"	12 00	16 00
Seconds, as in quality,	"		
" ground leaf,	"		
Virginia,	"	4 50	6 00
Rappahannock,	"		
Kentucky,	"	5 00	8 00
WHEAT, white,	bushel.	1 85	
Red, best	"	1 70	1 75
Maryland inferior	"		
WHISKEY, 1st pf. in bbls.	gallon.	33	34
" in hhds.	"	31	
" wagon price,	bbls		30
WAGON FREIGHTS, to Pittsburgh,	100lbs	1 50	
To Wheeling,	"	1 75	
WOOL, Prime & Saxon Fleeces,	pound.	40 to 50	20 22
Full Merino,	"	35	40 18 20
Three fourths Merino,	"	30	35 18 20
One half do.	"	25	30 18 20
Common & one fourth Meri,	"	25	30 18 20
Pulled,	"	28	30 18 20

MORUS MULTICAULIS TREES.

The subscriber has from 25,000, to 30,000 Morus Multicaulis trees now growing at his residence, with roots of 1, 2, and 3 years old, which will be ready for sale this all, and which he will sell on moderate terms

EDWARD P. ROBERTS,

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,	barrel.		
BACON, hams, new, Balt. cured,	pound.	12 1/2	13
Shoulders, do.	"	11	
Middlings, do.	"	11	
Assorted, country,	"	8 1/2	9 1/2
BUTTER, printed, in lbs. & half lbs.	"	20	25
Roll,	"		
CIDER,	barrel.		
CALVES, three to six weeks old,	each.	5 00	6 00
COWS, new milch,	"	30 00	40 00
Dry,	"	12 00	15 00
CORN MEAL, for family use,	100lbs.	1 62	
CHOP RYE,	"	1 50	1 60
EGGS,	dozen.	12 1/2	
FISH, Shad, No. 1, Susquehanna,	barrel.	8 75	
No. 2,	"	8 25	
Herrings, salted, No. 1,	"	3 75	
Mackerel, No. 1, ———— No. 2	"	10 00	12 00
No. 3,	"		
Cod, salted,	cwt.	3 00	3 25
LARD,	pound.	9	10

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

U. S. Bank,	par	VIRGINIA.	
Branch at Baltimore, do		Farmers Bank of Virgi.	1 1/2
Other Branches, do		Bank of Virginia,	do
MARYLAND.		Branch at Fredericksburg, do	
Banks in Baltimore, par		Petersburg,	do
Hagerstown, do		Norfolk,	do
Frederick, do		Winchester,	do
Westminster, do		Lynchburg,	do
Farmers' Bank of Mary'd, do		Danville,	do
Do. payable at Easton, do		Bank of Valley, Winch. par	
Salisbury, 1 per ct. dis.		Branch at Romney, ...	1
Cumberland, par		Do. Charlestown, par	
Millington, do		Do. Leesburg, do	
DISTRICT.		Wheeling Banks, 3 1/2 a	
Washington, } Banks, 1/2 p.c.		Ohio Banks, generally 5 a	
Georgetown, } Banks, 1/2 p.c.		New Jersey Banks gen. 3	
Alexandria, } Banks, 1/2 p.c.		New York City, par	
PENNSYLVANIA.		New York State, do	
Philadelphia, par		Massachusetts, 1 1/2 a	
Chambersburg, do		Connecticut, 1 1/2 a	
Gettysburg, do		New Hampshire, 1 1/2 a	
Pittsburg, 2 1/2		Maine, 1 1/2 a	
York, 1 1/2		Rhode Island, 1 1/2 a	
Other Pennsylvania Bks. 2		North Carolina, 5	
Delaware [under \$5] 4		South Carolina, 6 a 7	
Do. [over 5] 1 1/2		Georgia, 8 a 10	
Michigan Banks, 10		New Orleans, 8 a 10	
Canadian do. 10			

TO THE PUBLIC.

Try the New Agricultural Establishment in Grant-street, next door to Dinsmore and Kyle.

Every article warranted to be first rate. The subscribers, grateful for past favors, take this early opportunity of returning their thanks to their customers and the public in general, and beg leave to inform them that they are now provided with a very extensive stock of newly manufactured AGRICULTURAL IMPLEMENTS, suitable to meet the call of Farmers, Gardeners, Merchants, Captains of vessels, and others, viz: 1000 Ploughs, assorted sizes, from \$4 to \$15 each, comprising of the old common Bar Shear, Winand's Self Sharpener; Woods & Freeborn's patent, all sizes, "Davis," "Sinclair & Moore's" improved Hill Side Ploughs, highly esteemed for turning the furrow down hill, with wrought or cast shears; Wheat Fans, of various sizes and patterns, from \$15 to \$50 each, warranted to separate the garlic from the wheat; Corn Shellers, from \$12 to \$20; Cutting Boxes, from \$7 to \$50 each; Corn and Tobacco Cultivators, large and small; Expanding do., Wheat Cradles, warranted to have fingers of the natural growth, and Grass Scythes, &c. &c.; Castings, of all descriptions and patterns, by the lb. or ton, to suit customers, allowing a liberal discount to merchants buying to sell again—finals which will be furnished on the most pleasing terms I od every article warranted to be of the best quality, in

proportion to the cost price. All orders by mail or otherwise shall be duly attended to with the greatest despatch.

We would particularly call the attention of Country Merchants and others, wishing to purchase agricultural implements to sell again, to the fact, that we will furnish them with articles on better terms than they can be supplied at any other establishment in the city. Our assortment is complete and as varied as that of the most extensive concern in Baltimore.

We have also connected in its operations with the above branch of business a complete assortment of FIELD AND GARDEN SEEDS, kept by Thomas Denny—Also Garden and Farm Tools, of various sorts and of the choicest collection, which will enable our customers to have filled entire all orders in the Agricultural and Seed Departments. mh 26 JOHN T. DURDING & Co.

SUPERB DOUBLE DAHLIAS.

ALSO, GARDEN AND FLOWER SEEDS.

The subscriber offers for sale at his establishment the best collection of Double DAHLIAS offered to the public, and will warrant every root true to name and colour, but they are too well known to need any comment in their favor, as most all amateurs in the vicinity have seen them in bloom to their great satisfaction, so those who wish to have roots that are genuine, apply at the right place, and lower than any other in the city as to quality.

Besides he offers a general and good collection of Garden and Flower SEEDS, fresh imported, that cannot be raised to perfection in this country; he has selected from Europe, and will dispose of them on reasonable terms, with a general collection of Greenhouse, Herbaceous and hardy plants, also Bulbous Roots. Catalogues can be had at his establishment, corner of Pine and Lexington street, Baltimore, by

JOHN FEAST,
Florist & Seedsman.

ap 24 3t

FARMERS' REPOSITORY
OF AGRICULTURAL IMPLEMENTS AND EASTMAN'S CYLINDRICAL STRAW CUTTERS IMPROVED.

THE Subscriber informs the public that he has secured by letters patent his late and very important improvements on his Cylindrical Straw Cutter, by which improvements they are made more durable and easier kept in order. All the machinery being secured to an iron frame the shrinkage, wear and decay of wood is avoided. The feeding part of his improved machine is upon an entire different principle from the former machine; far more durable, requiring neither skill or care to keep it in order. These machines are so constructed as to make the freight on them less than half what it cost to ship the former or wood machines, an important desideratum to purchasers living at a distance; and I now offer it to the public upon the credit of my establishment as the most perfect machine in existence for the same purpose. They are also adapted to cutting rags for paper making, and for cutting tobacco as manufactured by Tobaccoists, &c.

I also keep these machines on hand made as heretofore with my new feeding machinery attached to them; and also a general assortment of Agricultural Implements, as usual. Elliott's Horizontal Wheat Fans, and Fox & Borden's Threshing Machines are both superior articles.

My stock of Ploughs on hand are not equalled in this city either for quality, quantity, or variety. I have a large assortment of Plough Castings at retail or by the ton, and having an Iron Foundry attached to my establishment can furnish any kind of Plough or Machine Castings on reasonable terms and at a short notice.

All repairs done with punctuality and neatness. On hand, a few Patent Lime Spreaders, Horse Powers, &c. &c. Also just received, a fresh supply of Landreth's superior Garden Seeds. In store, superior Timothy and Orchard Grass Seed and Seed Oats. All implements in the agricultural line will be furnished by the subscriber, as good and on as reasonable terms as can be had in this city, with a liberal deduction to wholesale purchasers. Likewise will receive orders for Fruit Trees from Mr. S. Reeves' Nursery, New Jersey.

JONATHAN S. EASTMAN,
Pratt street, Baltimore,

feb 20

Between Charles & Hanover sts

A NEW-FOUNDLAND SLUT.

For sale, a large size New Foundland Slut, of large size and very handsome. Her color is black. She is thoroughly broken to the gun, and in pup to a bull dog; price \$20. Enquire of the editor of the Farmer and Gardener, Baltimore, Md.

THE FARMER & GARDENER.

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, E. P. ROBERTS AND SAMUEL SANDS—EDITED BY E. P. ROBERTS.

No. 6.

BALTIMORE, MD. JUNE 5, 1838.

Vol. V.

THIS publication is the successor of the late
AMERICAN FARMER,

and is published at the office, at the N. W. corner of Baltimore and North streets, over the Patriot office, at two DOLLARS AND FIFTY CENTS per annum, if paid within one month from the time of subscribing, or \$3 if after that time. All letters to be post paid.

BALTIMORE: TUESDAY, JUNE 5, 1838.

AGENTS.—J. F. Callan of Washington City, District of Columbia, is our Agent, and will receive the names of new subscribers, as well as subscriptions due.

Mr. Archibald Hawkins, of Port Deposit, Cecil County, Md. is authorized to act in the same capacity.

We insert in to-day's paper a notice of the Fifth Annual Exhibition of the Columbian Horticultural Society, to be held in Washington, D. C. on the 13th and 14th June, and invite the attention of horticulturists to it. That part of the notice which alludes to the exhibition and comparison of domestic wines, is particularly interesting, and we trust will elicit due consideration.

We are happy to learn that several enterprising farmers in the vicinity of Ellicott's Mills and Elk Ridge, Anne Arundel County, are engaged in forming an Agricultural Society, and from the intelligence and patriotism of those whom we have heard named, we anticipate that their laudable intentions will be carried into triumphant effect.—We are certain that they are about to adopt one of the best plans that could be conceived to advance the interests of agriculture, and in the sincerity of our heart wish them success. To the farmers of the other counties of the State, where no societies are organized, we have to respectfully prefer the hope, that they will follow the laudable example about to be set them by their brethren of Anne Arundel.

The Crops.—It is gratifying to learn the continued good prospects in all directions of the growing crops. With but few exceptions, indeed, all the accounts we have received, go to prove that the crops have not for many years at this season of the year bid more fair to make a heavy yield. Unless, therefore, some casualty, by disease or in-

sect, should arise to blight their hopes, we think the husbandman of our country may look forward with fond and well grounded anticipations to be liberally rewarded by the earth for their toils and anxieties. But in the midst of all these just grounds for the indulgence in pleasurable feelings, we question whether the wheat crop will be a large one, and we base this opinion upon the fact that in many parts of our country much less seed were put in last fall than was customary heretofore.

Potatoes.—Let no farmer delay putting in his late Potatoes, as every day's procrastination is so much loss, and when he does put them in, let him not be sparing of his manure, for they are voracious feeders, and will not yield kindly without generous treatment. The mystery of their after treatment consists in keeping them well cleaned and the ground open.

Corn.—As the corn is now fit for working in most places, and will soon be in all, we most earnestly recommend to all not to let the grass get the start of them. By timely attention to its eradication at the proper period, one half the labor of cultivation may be saved, and saved too, with a certainty of adding greatly to the value of the crop of corn; for unless the ground be kept clean and well stirred, no matter how fertile may be the soil, or howsoever well it may have been manured, it will not yield generously. There is no crop so easily affected by cleanly or slovenly culture; nor are there any which rewards the first, or punishes the latter treatment with more signal discrimination. Corn, weeds, and grass, are, from their very nature, rival enemies—they cannot all thrive together; and he who wishes to succeed with his crop of corn, must take up the resolution to go to work from the start, and never cease working until it is laid by. We recollect when a boy to have heard an old gentleman, who was distinguished for his fine crops of corn, asked to explain the manner by which he so universally succeeded. His answer was laconic, but unfolded the whole mystery of the culture. "I keep my corn clean." "But then sir, how do you manage it?" "I keep my corn clean," was the

reply, and so emphatically given, that all further questions were suppressed; for by this time the inquirer had learned, that in the short and pithy sentence then just announced, he had a treatise on the culture of corn, as full of wisdom as tho' it comprised an octavo volume.

Maple Sugar.—We had a present a few days since from a Yankee friend of a small quantity of Maple Sugar, and we must confess we were very agreeably disappointed, as we found its flavour and granulation very superior to any idea we had formed of it. We had, from the representations of others, written, and oral, imbibed the opinion, that there was a faintness in the taste, which rendered it unpleasant to most persons; but if the present to us was a fair specimen, we have been in error, as it was entirely free from it.

We learn that the farmers to the eastward have made large quantities of the maple sugar this season, the long continued cold weather of the present spring being highly favorable for the operations of sugar boiling.

A Hand Thrashing Machine.—Cannot some of our skilful machinists invent one of these useful appendages of every farm, that could be propelled by hand-power easily, and sufficiently strong to do effective and clean work. Such an one is greatly wanted by a large number of small farmers, and would meet with an encouragement commensurate with its importance.

Sugar Beet.—We learn from the Wisconsin Cultivist, published at Milwaukee, that the farmers of Michigan are taking active measures for the efficient prosecution of the culture of the Sugar-beet with a view to its manufacture into sugar.

POUDRETTE.

Having observed in the Genesee Farmer some inquiries with regard to the manufactory of the above article established in the city of New York, by Mr. D. K. Miner, editor of the New York Farmer, we take pleasure in publishing the following letter, which we received some days since from that gentleman, by which the progress he has made will be shewn, and the inquiries in the Genesee Farmer answered.

We have also been favored with a barrel of the *Poudrette*, which we shall give a fair trial, on some drilled turnips without other manure, and report progress in due time.

The *basis*,—*human ordure*,—of this manure, has long been used in this vicinity by the market gardeners, with the happiest fertilizing effects, and we doubt not, its virtues under its new cognomen and chemical form, will be equally beneficial. In France the *Poudrette* has been used as a manure for years, and won golden opinions for itself.—We sincerely hope the enterprising editor of the *New York Farmer*, may meet with that encouragement which his laudable zeal in behalf of the husbandry of the country so eminently entitle him.

NEW YORK, May 14th, 1838.

To E. P. ROBERTS, Esq.,

Editor of the *Farmer & Gardener*:—

DEAR SIR—You have probably noticed, in the *New York Farmer*, that I have been engaged for some time past, in introducing an improvement in "*city economy*," by which the contents of privies, an article of great value to agriculture, now thrown away, and worse than that, as they are deposited in the rivers around the city, instead of being, as I trust hereafter they are to be, converted into an inoffensive and portable manure.

The subject was brought to my attention, last year, by a French gentleman, who is familiar with the process in his native country, and who is now engaged with me in the operation here.

We have had many prejudices to combat on account of the nature of the business, and to encounter, in consequence of the general derangement of business, which have delayed our operations; yet we are now preparing about 60 bushels of *Poudrette* daily, and have a prospect of doing much more after a short time, when other business shall have again resumed its accustomed activity; so that a few additional shares of our stock may be paid for, which will enable us to increase the number of teams required to "remove the deposits." Of the value of *Poudrette* as a manure no person of my acquaintance, familiar with its preparation, entertains a doubt; yet there are few persons in this country who are sufficiently acquainted with its use to appreciate duly the benefits which will surely result from the labors of those who shall introduce a mode of preparation by which the immense amount of valuable material now thrown into our rivers, and of course a nuisance to all classes of community, shall be converted into an inoffensive, portable, and highly valuable manure. The process of preparation in my opinion does not materially, if at all, deteriorate its value, as I will satisfy you when you will visit our works.

That you may be better acquainted with the article, and have an opportunity to test its value, as well as its inoffensive character and portability, I send you a barrel, and shall be much obliged by your using it for any kind of vegetables, or grain, or on grass, as may be convenient for you, and noting its effects as compared with other manures. I cannot give practical instruction as to

the best mode of application, but will observe, that I am using it in my garden for experimental purposes, by putting some in the hill, some in drills, and spreading some broad cast, and raking it in. I estimate its strength or value in proportion of one bushel of *Poudrette*, to eight or ten bushels of barn yard, or stable manure, and equal bushel for bushel, to bone dust. We have not yet, for want of means to extend our works, been able to furnish a bushel to any person except those who have taken a share, or shares of our stock, although numerous applications have been made for it in small and large quantities, as well by gentlemen in neighboring States, as by those in this vicinity. To those who pay in \$100, or take a share, we furnish two hundred bushels of *Poudrette* as their annual dividend, within three and six months from the time of payment, which is equivalent to sixty per cent. on their installment, as we can receive thirty cents at the works for every bushel we can make.

We hope soon to be able to extend our works so as to furnish *Poudrette* to those who wish it, and I trust important benefits will result to agriculture from the introduction of this new source of improvement—*new*, at least, in its application to any considerable extent in this country.

The usual enquiry is "*how*" and "*how much*" shall we use—not "*is it useful*?" There are, however, many whose nerves are too sensitive to "think of using it," although they have little objection to a slice from the rich sides, or the delicate ham, of a fat porker—and seldom turn aside when a well stuffed and roasted duck, who in life delighted to seek food in all sorts of places, is smoking before them. *Prejudice*, however, will give place to reason, where important facts shall have opened her eyes. The result is *certain success*.

I hope to hear from the effects of the barrel sent you on the 11th inst. on board of the Schooner *Amanda*, Bedell, master.

I am, Sir,

Very respectfully,

Your obedient servant,

D. K. MINOR.

WASHINGTON CITY, May 26, 1838.

E. P. Roberts, Esq.—Dear Sir—Although not personally acquainted with you, yet as in agriculture, so in morals, "the tree is known by its fruit"—and being a constant reader of your mind as set forth in the pages of your inestimable periodical, it cannot be said, that to me or any of your readers, you are a stranger other than personally.—The man who has the moral courage to become an editor, and stand before the world to combat with old, deep rooted, and in many instances, most ludicrous prejudices, (as one who conducts an agricultural paper does,) must and will become known to multitudes whom he never sees or hears of. The pity is, that your labors are not more extensively circulated, especially in our own state, for well am I convinced, that if proper attention was paid to the directions set forth in the *Farmer and Gardener*, we should, in a few years, see the now comparatively worthless lands of our State, bringing nothing but pines and broom-sedge, becoming fertile fields, and adding to the comfort as well as the coffers of its inhabitants. But I am wandering from the subject which induced me to

address you. When I first became a subscriber to your paper, the price was Five Dollars a year.—This I did not consider too much, or I should not have been induced to take it; but when you reduced the price one-half, trusting to the generosity of your patrons to make up in number what you had sacrificed in price, I then felt that I had a duty to perform, and that was to get you at least another subscriber. How many I may have induced to subscribe by my advice, I am not informed, but two additional subscribers I can certainly call my own making. I allude to the one I now (together with my own) enclose the subscription for, and the other our Horticultural Society, which I was instrumental in obtaining. Several of our members are subscribers to, and well pleased with the work; and others through the agency of the Society, becoming acquainted with its merits, have expressed themselves highly gratified with it.

I must now tell you that about two years since I took it into my head to turn farmer. This I was induced to do from the fact that I found the desk would soon end me if I did not get at something to call me away from it during the hours not necessarily employed in my office. To this end I bought 125 acres of land, within four miles of the city, fifty of which are open, but pretty well worn down; the soil mostly sandy, with a portion of stiff. On the open land I have been exerting my skill, aided by yours, and other such advice, for my first object was to obtain the best information I could, first in our own State, and next from the North, for which purpose I became a subscriber to yours and Judge Buel's papers, besides reading most of the periodicals on Agriculture and Horticulture, taken by the Society. My ultimate object is the Silk Culture. Your Manual I have studied pretty thoroughly, and was flushed with the hope that I should have been able to set out this spring at least an acre of the *Multicaulis*, but owing to circumstances beyond my control, I did not accomplish my design of getting the ground in such order as I wished it before I planted. If there is any truth in "location and soil" mentioned in your manual, I have land minutely answering the description. I wish to sow this season at least an ounce of the *Morus Alba*, if you can furnish me with the seed. Whether any seed of the *Multicaulis* has yet been for sale in this country, I am not aware. If there is any of it to be got, I should like an equal quantity of it. This you will do me the favor to inform me of. I wish also, to plant out either in the fall or next spring, about a dozen good standard trees of the *Multicaulis*. Will you let me know if you can furnish them at the best time for setting out. These are articles I don't want hybrids of, and therefore prefer getting them where I have confidence, than to taking the chances nearer home.

C. H. W.

From the National Intelligencer of May 28.

COLUMBIAN HORTICULTURAL SOCIETY.

There was a very numerous attendance of members at the adjourned meeting of this society, held at the City Hall last Saturday evening. It was gratifying to observe that some of the most efficient and valuable contributors to the floral department of the former public exhibitions were present at this meeting, aiding by their counsel

and information the efforts of the committee appointed to make suitable arrangements for the ensuing public exhibition, which is to take place at Carusi's Saloon, on the 13th and 14th of June.—In announcing the appointment of this committee last week, the names of its members were omitted in our report. They consist of the following gentlemen, whose best endeavors, we are confident, will not be spared to render the public exhibition worthy of the society and the occasion: Messrs. Robt. Barnard, John A. Smith, W. Yeates, A. McWilliams, A. Suter, Joshua Pierce, W. Rich, W. Cammack, W. Buist, John Douglass, W. B. Magruder, Geo. Shoemaker, W. A. Gordon, J. M. Cutts and R. Dick.

Mr. Callan from the committee appointed at the last meeting to confer with the committee of the Columbia Typographical Society, informed the meeting that he had lately seen some of the members of that committee, who told him there was to be a general meeting of the delegates from the other societies, the report of whose proceedings would be given next week.

Mr. Barnard presented to the Society, with the respects of the author, "the memorial (lately submitted to Congress) of Charles Lewis Fleiechmann, on the subject of improving the agriculture of this country."

Mr. Barnard, from the committee of arrangements for the ensuing public exhibition, announced the formation of sub-committees, the time fixed for holding the exhibition, &c.

The display of Flowers exhibited at this meeting was very handsome, and did much credit to Messrs. Dick, Gunnell, and Buist, as will be seen by the following report on that subject.

"Mr. Dick presented a bouquet consisting of Heliotrope, Tea Roses, Wall Flowers, and a beautiful specimen of Stock Gilly flower, raised from seed presented by the late Dr. Baltzer; the whole collection was very fine.

"Dr. Gunnell, sixteen varieties of Roses, most of them new, all very superior. Among them were Louis Philippe, Lee's Perpetual Crimson, Strombio, Webster, Thea Margareta, Duke de Angiers, Noisette Janne, &c. Yellow Centre Tea Rose, Glorie de Guion, Harrison's Double Yellow, Blush Tea, Thea Mirabilis, Triomphe de Luxembourg, Bengal Triumphant. These roses are all of great merit, and will prove a valuable acquisition to our collections.

"Mr. Buist exhibited a branch of Erythrina Cristagalli, (Cock's Comb flower,) near 3 feet in length, covered with flowers, a fine Cactus Speciosa, full of flowers, Frischia Globosa, (by far the best species of this beautiful flower,) Gardoqua Hookerii, and Verbena Tweediana, all in fine cultivation."

After much interesting conversation and interchange of sentiment and opinion on the proceedings of the meeting and the ensuing exhibition, the society adjourned until the next regular meeting on Saturday the 2d of June.

The fifth annual exhibition of this Society will be holden at Carusi's Saloon, on 11th street, Washington, on the 13th and 14th of June next, to which growers of flowers, fruits and vegetables, and the friends and promoters of the honorable, interesting, and useful art of Horticulture, are

respectfully invited to attend, and contribute from their productions.

The following members have been constituted a General Committee of Arrangements on this occasion; and to any one of them, those purposing to exhibit will please apply for information, as to the arrangements and other particulars: Robert Bernard, Wm. Buist, Wm. Cammack, J. M. Cutts, Robert Dick, John Douglass, jun. Wm. A. Gordon, Alex. McWilliams, Wm. B. Magruder, Joshua Pierce, Wm. Rich, George Shoemaker, John A. Smith, Alex. Suter, Wm. Yeates.

Visitors will procure their tickets, as usual, at the door, price 25 cents each. And members are particularly requested to obtain their tickets of admission for themselves and families, from the treasurer, (Mr. J. F. Callan,) as the doorkeeper will otherwise be under the necessity of demanding the admission fee—it being distinctly announced that no one, without distinction, can be admitted without a ticket.

An oration will be delivered at the close of the exhibition.

The society having been made a recipient, by special request from several of the most distinguished cultivators of the grape in the United States of liberal samples of wines manufactured by them from that fruit, with the express view of testing the merits of the same, in competition with wines of foreign growth, the committee respectfully invite all other wine growers whom the society may not at the present time have the pleasure of knowing by name or reputation, to contribute also from their stores specimens of their facture in evidence of their patriotic zeal to promote the comforts, enhance the beauty, and enlarge the resources of our common country, that they too may become competitors in this trial of skill, which will be decided at the approaching exhibition; and those who feel so much interest in the subject as to respond to this call, are particularly requested to accompany their contributions with a description of the appellation, age, color, culture, soil, and exposure of the grapes from which their wines are made, and of the manipulation pursued in their manufacture, &c. that the necessary knowledge may be imparted to those of their fellow-citizens who desire to emulate them, to enable them to "go and do likewise." And the same requirements, so far as can be obtained, will be fulfilled in regard to the foreign wines which may offer themselves as the standard of competition.—The following gentlemen have accepted the duties of committee for the purpose of selecting the judges of the wines, and making such arrangements as shall insure a fair, just, and enlightened decision on the merits of the several wines submitted to them: Gen. N. Towson, W. W. Seaton and Thos. L. Smith, Esqs.; and to this committee contributors will please address their communications and specimens.

Bp order, ROBERT BARNARD,
Chairman of the General Comm. of Arrange'ts.
WASHINGTON, May 22, 1838.

From the Germantown Telegraph.

MANGLE WURTZEL AND RUTA BAGA.

Mr. Editor—The period has now arrived at which I promised to give you my opinion of Mangle Wurtzel as a food for cows, and my plan of cultivating and securing them. I consider

them to be very valuable. My cows fed upon them last winter, kept in fine health and flesh, gave a large quantity of very rich milk which made superior butter. They saved me much hay, and my cattle were remarkably fond of them throughout the winter. Farmers should by all means have them or ruta бага, and indeed both, for their cattle.

MANGLE WURTZEL.

In cultivating them, I select a piece of land in good tilth, draw furrows two feet and a half or three feet apart, which I fill with good manure. I then throw a furrow from each side upon the manure, rake the top smooth, make a drill, drop the seed about ten inches apart, and cover with the rake. This should be done the latter part of May. I till them with the hoe-harrow and hand-hoe, and if need be with the plough, and keep them free from weeds. The bottom leaves are good food for cows and hogs, and the root is benefited by their removal. The crop is a very heavy one, though I did not ascertain the amount per acre. The crop should be taken in before there is a severe frost. The leaves should be rung off, not cut, as that makes them bleed and rot. They should then be placed in a dry, warm cellar, with the front carefully piled. Thus put away, they will be good for feeding until late in the spring. I have not fed sugar beets, but have been told by those who did so last winter, that cattle do not generally like them; beside, they cause them to scour. In Mangle Wurtzel there is no mistake.

RUTA BAGA.

My plan of cultivating ruta бага is the same as above. I plant them in all June. They are not injured by slight frosts. I cut off the tops and secure them in heaps well covered with straw, and then with earth about 6 inches thick, which I obtain by digging a ditch round the heap; they should not be put below the surface of the ground, as they are thereby rendered liable to be wet and frozen, particularly on clay subsoils.

SILK CULTURE.

HEREFORD, BERKS Co., Pa. }

March 22d, 1838. }

Respected Sir—Our company is termed "The Hereford Silk Culture and Manufacturing Company of Pennsylvania." We have adopted a constitution differing but little from that of the Beaver Silk Co. of this state, and as soon as we will have obtained our charter from Gov. Ritner, the company will then be immediately fully organized, and go into operation with spirit, and the fullest confidence in complete success.

The capital of this company is \$50,000, and we have purchased an excellent tract of land near this place, (Hereford, Berks co., Pa.) on which we will set out a sufficient number of Morus Multicaulis trees to ensure a good beginning the ensuing spring. We will also raise and set out a large number of the Morus Alba, though we will principally depend upon the Mor. Mult., as this species seems to do very well here. This company's object is to make raw silk for market, and some sewing silk, at first a while, and after they will have got these branches of business into a fair way, they will, if they will then think proper, engage in manufacturing other fabrics also. We expect ere long to find a good market for our raw silk in Philadelphia; as a silk manufacturing company

there is understood to go into operation next summer. Respectfully, &c. **JOEL Y. SCHELLY.**
F. G. Comstock. *Silk Culturist.*

SILK—From an investigation, which I prosecuted last winter to some considerable extent, I ascertained that silk could be manufactured and raised cheaper than cotton or flax. At least, I satisfied myself on the subject. Children and aged people can perform most of the labor of procuring the raw silk, which is the principal part. Let us make an estimate:

In one acre there are 43,560 square feet,
1,210 trees in one acre 6 ft. by 6
4,840 " " " 1½ ft. by 6
Each tree, (Italian mulberry, 6 years old) will produce 6 lbs. of leaves.
50 lbs. of leaves (some say 36) will feed 1000 worms.

300 cocoons will weigh one pound.
3000 cocoons (or 10 lbs.) make one pound of silk.
30,000 trees, 6 years old, will produce 180,000 pounds of leaves;
which will feed (at 45 pounds per thousand) four millions of worms. Allow 3000 to a pound of silk; this, at \$3 per pound, will amount to 3,999 dollars. Reeled silk is, however, oftener valued at five or six dollars the pound than three.

The above calculation is made on the white mulberry. The introduction of the *morus multicaulis* into this country, will be an era in the silk business. It will reduce the labor of raising the raw silk about one-half, if not two-thirds. It saves nine-tenths of the labor in gathering the leaves. Those leaves which are found to produce better silk, grow from 25 to 35 inches in circumference. One pound of them contains one-third more nutritive matter than a pound of the best white mulberry leaves.

I have seen silk of the most durable texture, manufactured in our farmers' families, on the common spinning wheel, or loom.

In Economy, Beaver co. Pa., they make pantaloons, jackets, &c. of the silk tow. It is used in place of common linsey, or jeans. Their sewing silk, vestings, lustrings, pocket handkerchiefs, and dress handkerchiefs, are of the very best quality. They have no ground occupied exclusively by mulberries: but plant their streets and side-walks and garden alleys, and hedges, with them.

However, to make the business at once successful and profitable, every farmer ought to start a nursery of mulberry trees immediately; calculating, in the course of a few years, to have two or three acres set with them, besides all his lanes, and yards and useless corners. If he should happen to live in some of the barren or hilly parts of Ohio, why, all the better; he can then set his whole farm with them. From one tree of the *morus multicaulis*, you can raise many thousands in four or five years. Every limb may be cut into as many pieces as there are buds upon it, and every bud will produce a tree.

There is a Connecticut farmer who lives near me, whose wife and children have for several years manufactured sewing silk in sufficient quantities, nearly, if not entirely, to clothe the whole family, and at least to supply all that part of their dress which had to be bought. They gathered their leaves from the native mulberry which grows wild in the wood.

[We found the above in the *Silk Culturist*, where it was not original.]

Northampton Sewing Silk is in high repute in New York. Orders are daily received here from all parts of the Union, and as yet the manufacturers are unable to supply the demand. The extensive new brick factory will soon be put in full operation, when almost unlimited quantities of the beautiful article will be manufactured. The raw material is imported from Bengal and Canton, because not enough of the article is yet raised here for one week's consumption. An intelligent mercantile firm in Hartford last week, assured us that the Northampton Silk, in strength and lustre, was superior to either the Italian or Hartford silk.

Northampton Cour.

From the *Genesee Farmer*.

SUMMER PRUNING.

A strong argument in favor of summer pruning, and also of spare pruning, may be drawn from the following physiological data, which we quote from Mr. J. Gross, and which every man of science will appreciate as correctly stated.

"It is well known to vegetable physiologists of the present day, that timber on the trunk of a tree is composed of concentric layers, or rather cylinders of wood, each cylinder being the product of one year. It is likewise generally agreed, that the fibrous part of these cylinders is an aggregate of the fibres, (or roots, as they may without much impropriety be called) which originate from the base of each leaf bud, and descend to the ground, insinuating themselves between the inner bark and the outer sap wood, covering the surface of the latter. It is evident, therefore, and was long ago observed by Duhamel, that any natural circumstances which remarkably increase or diminish the number of leaf-buds in a tree, will occasion a correspondent modification in the thickness of the wood produced by them. Pruning in the autumn or early in the spring, diminishes the number of leaf-buds, and will consequently be followed by a thinner layer of wood than usual."

The above considerations, superadded to those recently stated in the *Farmer* in favor of summer pruning, we trust will induce some to make the experiment of innovating upon the old, but we think bad practice, of pruning in the autumn or spring. The time recommended for summer pruning, it will be remembered, is between the first and second growth, late in June or early in July.

ON THE BENEFIT OF USING STRAW AS TOP-DRESSING FOR YOUNG CLOVER.

To the Editor of the *Farmers' Register*.

Madison, April 14th, 1838.

As the time is near at which farmers generally haul out the straw which the farm produces, beyond what is requisite for the support of its stock, I take the liberty of recommending the appropriation of some of it to an object worthy of their attention, but which hitherto seems to have been entirely neglected; that is, as a top-dressing to wheat, for the purpose of ensuring clover on spots which otherwise would be entirely destitute of vegetation. The first numbers of the *Register* contained several articles on the subject of scattering straw, which attracted my attention and for some

years I followed the course there recommended, that is, to haul out the surplus straw as back loads when bringing in the crop of wheat to the machine, and then at some convenient time to spread it. This method has its advantage, as it is hauled out with little or no loss of labor, but here it ends, and the disadvantages begin; for this was never as valuable as the one which I pursue, and for this simple reason, that the poor spots on which it has been spread, had failed to take in clover; and then, instead of the heavy growth of clover which it can produce, we had to depend on the modicum of straw which we had applied for the improvement. My course is now, to apply straw immediately after sowing clover seed, and the result has exceeded my most sanguine expectations; for at this time, I have clover on poor spots thus treated, much better than on land much richer; and it is now better than it would have been left as such spots generally are. It may be said that fine manure would be better, as by that, not only the clover, but the wheat would be improved by it. I admit the truth of this, provided it could be done; but when we reflect on the labor requisite to accomplish top-dressing on as large a scale as the impoverished condition of Virginia requires, it seems out of the question even to hope that, as a general thing, it will ever be accomplished. In recommending the above course, I go upon the idea, that in agriculture, as in government, we should be content with the most practicable scheme, and leave to others the pursuit of theories as beautiful as they are difficult; and furthermore, I shall be contented to have this tried as an auxiliary, for one trial will suffice to fix our attention to it; for when we take into consideration the facility with which straw is moved, and the surface over which a load will extend, I hazard little in saying, that there is no way in which as much improvement can be effected; and furthermore, I contend, that even admitting that our lands have strength enough to ensure clover, we should find our account in this application, as it is in the infancy of the clover that it gives an impulse which no application, made at a later period of its growth, can give.

AGRICOLA.

GEOLOGICAL SURVEY OF MARYLAND.

By PROFESSOR DUCATEL.

(CONTINUED.)

Sec. II. Geological Examination of Cecil Co.

The extent of Cecil county is little above 394 square miles, embracing 243,206 acres, that present the greatest variety of soils. Like all the Eastern-shore counties it is most conveniently intersected by rivers and creeks that empty into the Chesapeake, and it is connected with the Delaware by means of a canal. The topography of the lower portion of the county, S. of the Elk, is very different from that of the upper portion, which is based upon primary rocks, whereas the former consists of the usual arenaceous deposits of the ferruginous sand formation. This lower portion is divided into necks of land that merit a separate description.

Sassafras neck, between the Bohemia and Sassafras rivers, contains some of the best lands in the county. Its middle portions are generally level, or but gently undulating, whilst along the bay and river shores the country is broken into hills.

The soil varies from a sandy to clayey loam, in many places mixed with green particles, often highly ferruginous, and in some parts gravelly. It has been heretofore improved by plaster and clover, but it is now beginning to receive a more permanent improvement by the use of lime and *marl*. The surest and best crops that are now raised are those of corn and oats, but with the addition of lime good wheat crops have been also made. The neck is well supplied with wood and timber, consisting of the several species of oaks, hickory, chestnut, poplar, walnut, &c. Where the timber has been removed a new and vigorous growth of chestnut, walnut and locust are observed to spring up. It is worthy of remark in reference to the soils of this section of the county, that where the light ferruginous sandy-loam soil occurs which is liable to run into gullies, it is strictly speaking productive through its whole depth—sometimes of 50 feet—; so that crops may be raised from it, even where the whole of the vegetable mould forming the soil proper of most lands, has been removed: hence, perhaps, the propriety of levelling the torn up lands with a view of converting them into arable slopes. This circumstance, it is believed, deserves to be particularly noticed whilst contemplating the means of improvement to be applied to such spots.

Bohemia Manor, lying between a river of the same name and Back creek, also presents a body of fine lands. Along the river shores, on the Bohemia, the county is hilly and gravelly, and towards its head the soil is a highly ferruginous sand containing a few green particles. The banks of Back creek, on the other hand, exhibit a stratum of sandy-loam overlying, a bed of ochrey-clay, imbedding masses of a coarse ferruginous sandstone, occasionally compact and slaty, which as they are washed out of the banks, form an accumulation on the river shore, of loose material that might with some propriety be termed *shingle*, in its geological acceptation. About the head of the creek, the county is hilly, gravelly, and in some places strewed over with large boulders of a close-grained sandstone, and masses of silicious pudding stone agglutinated by a cement of oxyde of iron. In the middle and upper portion of the neck, clay is the predominant constituent of the soil, which is found to be easily improved by clover and plaster, but above all by lime. The tracts of woodland bear a fair proportion to the cleared land, and consists of the usual growth of oaks, hickory, chestnut, &c.

Back creek neck likewise affords some tracts of very valuable land, but the surface of the country is more uneven, in the upper parts hilly and gravelly, and frequently covered with numerous boulders of sandstone and quartz rock.

Elk neck is one among the least favored portions of Cecil county, it forms a ridge little short of twenty miles in length from Elkton to Turkey point, the greatest breadth of which is less than five miles, and presents a succession of gravelly hills overlying a deep deposit of ferruginous clays, enveloping beds of red ochre along with numerous and large masses of a coarse ferruginous sandstone. This ridge which attains in some places the height of 800 feet above tide, has been long ago stripped of its timber, and is now covered by a young growth of oaks and chestnuts intermixed with dogwood. On the Elk side of the

neck the slopes present an exhausted soil, very much run into gullies, the soil being generally sandy or gravelly. Still there are many eligible spots that might be converted into productive farms, and the whole is susceptible of entire renovation by the application of lime combined with a judicious mode of cultivation. On the N. E. river side the soil is infinitely better and there are some highly improved farms especially in the vicinity of N. E. village. Around Elkton the soil is loamy, and needs only the addition of lime to make it very productive.

It has already been stated that the upper portions of the county are based upon primary rocks, which at the southern termination are covered by a deep deposit of ferruginous clays, sand and gravel. Wherever these occur the soil is very indifferent, and the whole tract of country thus constituted is poor and has been long ago despoiled of its timber. The ridge lands, however, are now covered by a young growth of black oaks and chestnut, whilst the more level lands extending along the N. E. river and the bay generally possess a tolerably good soil. But wherever the primary strata are uncovered the rocks furnish by their decomposition soils of various qualities according to the nature of the rock, and some of these soils are of the very best kind. Wherever the predominant rock is that designated by mineralogists as the *hornblende*, a red soil is invariably produced which is naturally fertile and possesses great capacity for improvement. On such soil lime acts with great quickness and with wonderful effect. The other granitic aggregates will produce soils of a light color that have much less body. There is a loose red soil also produced by the decomposition of the *serpentine* rocks, which is mostly barren and ought not to be confounded with the one just mentioned as resulting from the decomposition of the *hornblende*. A soil of this kind occurs in the upper part of the county, W. of the Little Elk, near the Pennsylvania line: it is easily recognised by the stunted growth which it supports.

At the head of the Big Elk the rocks are coarse grained *granite* and *gneiss*, producing a light colored thin soil; whereas at the head of the Little Elk the rocks are principally *hornblende* supporting a red soil, upon which there is commonly a valuable growth of timber. Towards the head of Principio creek the *gneiss* and *hornblende* alternate with each other, and it may always be remarked that the heaviest growth of wood is over the latter rock; this growth consisting chiefly of white, black and chestnut oaks, poplar, hickory, walnut, beech and gum. Between the Big and Little Elk the country is stony and hilly, with large masses of quartz strewed over its surface. The soil is generally thin; but it improves between the Little Elk and the W. branch of the N. E., and a fine region of country presents itself about East Nottingham and the Brick Meeting House, where the soil which takes plaster kindly has been in many places further improved by lime.

About the Rising Sun and from it to the Octorara, the country though rugged, is thickly settled and in an improving condition. Beyond the Octorara, and between it and Conowingo all along the Susquehanna there are tracts of first rate land consisting of rich bottoms on the margin of the river, and a fine clayey-loam soil on the hill sides.

The country in this direction is elevated, hilly and, a little removed from the river, is considered very healthy. It is in an improving condition, also, from the use of lime, and already good crops of corn, wheat, oats, and buckwheat are usually made. There are likewise to be met with fine lots of timothy, here, as well on most of the upper portions of the county, where the heads of branches furnish excellent sites for artificial meadows, and of these advantage has very commonly been taken. Along the river there are tracts of land covered with very valuable timber, oaks, poplar and beech.

An interesting feature in the physical geography of Cecil county is furnished by the numerous streams that flow through its northern boundary, furnishing it with an amount of water power, equal, perhaps to that of any other county in the State. The most important of these streams are the Conowingo and Octorara, that empty into the Susquehanna, which, although they take their rise in Pennsylvania carry a part of their waters through Maryland; the former for about three miles, and the latter about six. The Octorara, in Maryland, is a rapid and broad stream, affording a great amount of water-power, a tenth part of which only is now used: it empties into the Susquehanna six miles above Port Deposit. The entire course of the Principio, which empties into the head of the bay, is within the limits of the county; and this may be said to be the case with the two branches of the North-East and those of the Elk, all of them supplying numerous grist and saw mills, forges, rolling mills, furnaces, and other establishments calculated to develop the industrial resources of the county.

The mineralogy and geology of the country, are both full of interest, but the scientific details are withheld until the final report on the survey. So much only will be given at present as is deemed interesting in an economical respect.

The greater part of the lower portions of the county, comprising the necks that have been previously described, in their middle and upper parts, belongs to the *ferruginous sand formation*, but the extremities of these necks, their limits on the bay and river shores, presents deposits of sand, gravel, and clays that doubtless belong to a much more recent period—a circumstance which it is of some consequence to attend to, as it satisfactorily accounts for the fact, that the beds of the valuable materials forming members of the ferruginous sand formation, are seen, or reached most commonly at the head of the principal streams, or in the beds of the secondary ones only. The materials referred to are the *green-sand* and the *micaceous black-sand*, or black marl—and I prefer to give it this latter appellation, because it is employed as marl, and because the name designates its use and value, and is hence more likely to fix the attention of the farmer than if a technical expression were selected. As these deposits belong only to the *ferruginous sand formation*, it is desirable that the limits of this formation should be correctly assigned. In ascending the county I have invariably lost all traces of it north of Back creek, so that I am disposed to think that the head waters of this creek limit the occurrence of the *greensand* and *black marl* in Cecil county. At Chesapeake city—the Maryland termination of the canal—the excavations are made through a

deposit of micaceous black sand filled with pyrites and lignites, but in which no marine fossils were observed. The whole of Elk Neck, with its deep deposits of ferruginous clays and sand, belongs probably to the same period, but I have no where in this quarter met with the green-sand or black marl. At the head of Piney creek there is an extensive bed of lignitiferous clay. The mineral resources that would be most likely to occur in this region, are beds of iron-ore, yet none of any consequence have so far been discovered. Specimens of a very indifferent quality were handed to me for inspection by Mr. Charles Johnson, and were represented to be much inferior to others that had been collected and mislaid.

I have already stated that the southern termination of the primary rocks is overlaid by a deposit of a more recent period. The materials that compose it are gravel, sand, ferruginous clays, approaching to red ochre and lignitiferous clays, varying in color from dark grey to black, which latter has sometimes been mistaken for the black marl. The excavations for the Baltimore and Philadelphia Rail Road, afford facilities for an examination into the character of this deposit, and at the same time show that it is not of great depth, for on the east side of the Susquehanna they reach the primary rock at the depth of only from twelve to fifteen feet, and in the vicinity of Elkton, at Lonerger's cut, which is made through a spur of the Chestnut Ridge, where the surface had all the appearance of an ochrey clay, it actually proved to be a decomposed hornblende rock, enveloping masses of ferruginous jasper. Beds of iron ore might have been expected to occur in a deposit thus constituted, and it is somewhat remarkable that these excavations should have disclosed no resources of this kind. The only bed of ore known to exist in these parts is in the vicinity of North-east Village, on the east side of the river, on the lands of Gen. Cadwallader, where Mr. W. Whitacre of the Principio Furnace, informs me that he has raised several tons of very good quality. The ore occurring on Flint Hill, near Elkton, is not of a good quality, being too flinty, and approximating in character to a ferruginous jasper.

The region of the primary rocks, comprising the whole of the upper portions of the county, furnishes many valuable materials, some of which are fully appreciated, whilst others have been, so far, neglected. Among the former is the building stone quarried near Port Deposit, which is a sienite of very uniform texture. The situation of these quarries just at the head of tide, as well as the good quality of the stone, will secure to them a constant and increasing demand for many years to come. From data that were furnished me by Mr. Anthony Smith, I estimate that from 12 to 15,000 perches of the stone are disposed of annually. Soapstone, of very good quality occurs in several localities through the county. On the west branch of North-east river, about two miles from the head of tide, at Patterson's Works, a quarry was formerly opened, from which large slabs used as stepping stones to some of the houses in Charleston, have been procured. It is of a green color, compact, and easily cut. At New Leeds, on the Little Elk, there has also been a quarry of soapstone opened, but which is now likewise abandoned. Talcs, and white varieties

of asbestos, that are closely allied to the soapstone occur in the Serpentine rocks at the north boundary of the county, between the Octorara and the Conowingo, and east of the Octorara near the Pennsylvania line. These minerals have of late years acquired a value which they were not formerly known to possess. They are now used in the manufacture of what have been termed stone paints as substitutes for the metallic pigments.—The soft and light colored varieties are selected, and are ground up with whale oil. Paints of this description are said to answer a very good purpose, especially for the roofs of houses, and two coats are found to form an excellent basis for a single coat of common paint. The price at which such paints sell is five dollars per cwt.—Asbestos has also been recently used for the lining of fire proof chests, and has been purchased at ten dollars a cart load. It is likewise among the serpentine rocks that beds of chromiferous iron are found—an article at present in great demand, and selling at from twenty to twenty-five dollars a ton, being extensively used for the manufacture of a variety of pigments and dye stuff.—The localities of this mineral are near the boundary line of Pennsylvania, north of the Rising Sun; and in the vicinity of Louisville, where it has been raised by Mr. Joshua Lowe. The magnesian minerals are also associates of the serpentine formation, and where they occur of a pure white, are constantly in demand.

(To be Continued.)

From the Cultivator.

THINGS WHICH WE WANT.

We want, *imprimis*, stronger inducements to agricultural labor through our public authorities, by means of a liberal policy of patronage, in bounties and rewards; and we want a stronger guarantee for recompense, in the establishment of a better system of practice.

We want more public and less party spirit—more devotedness to the state, and to the interests of the people at large, and less to local interests, individual cupidity, and personal aggrandizement.

We want more stimulus to individual effort and less to joint stock companies. Men will be guilty of acts of injustice and oppression, in a corporate capacity, which they will be ashamed to commit on their individual responsibility. In the one case they do but share, and they generally contrive to shift on to others, the odium of a bad act. But alone, they have no subterfuge, no excuse.

We want, for our boys, who are destined to till the earth, scientific and industrial schools, that they may acquire, simultaneously, and in the scholastic period of life, a knowledge of the best practices in farming, and of the principles upon which it can now alone be judiciously and successfully conducted.

We want, in due time, an agricultural survey of the state, which shall collect and make known to all, the best practice in farming which prevail in each district—as also the labor-saving implements employed in each, and other relative usefulness, breeds of domestic animals, products and profits of crops, new subjects of culture, &c.

We want more practical business men in our legislative halls as well as upon our farms—men of sound judgment and independent bearing—and who, although they do not talk as much, can think

and act as correctly and as promptly as professional talkers; and who, knowing best the true interest of the mass of our population, are likely to do least injury, if they do not do the most good.

We want a more extensive circulation of agricultural periodicals—because they disseminate useful knowledge, stimulate industry, call into action latent genius, awaken laudable competition, induce general improvement, bring into exercise the noblest feelings of our nature, and inculcate good will to our fellow-men.

We want to have inculcated and taught by precept and example, in our public halls, in our social circles, and in our schools, high and low, the great moral and political duty, of identifying our individual with the public interest, and of considering the one as in a great measure inseparable from the other.

We want more system—more employment for our females, that they may be more healthy, more robust, and more serviceable to posterity—more contentment with our rural employments, a greater desire to increase our knowledge, to improve our practice, and to bring our sons up “in the way they should go” as independent tillers of the soil.

We want more attention paid to augment our manures, the food of our farm crops, that our lands, instead of growing poorer every year, may increase in fertility, in products, and in profits.

We want to understand better than we do, the principles and the practice of draining, that much of our best land, now unproductive and noisome, may be rendered productive, profitable and healthy.

We want to extend the culture of roots and clover, as tending to perpetuate fertility, fatten cattle, furnish manure, and fill the granary.

We want the conviction that we can improve, the determination that we will improve, and we shall then soon become conscious that we have improved in the management of our farms.

CARROTS.

The New England Farmer gives an account of a bed of carrots, raised in Westborough, Mass. “This carrot bed covered one and a half acres of ground; was ploughed twice, harrowed and bushed. About one third of the bed was manured—The rows were made by a machine, 13 and 18 inches apart, on the 7th day of June. In harvesting, 811 bushels of carrots were taken from the bed, some of which were sold at 40 cents per bushel—the tops constituted the principal food for 18 head of cattle from October 21st to Nov. 8th.

A brief summary will show the value of the experiment:

Amount of labor expended, including oxen, 14½ days,	\$41.50
Manure, seven loads,	7.00
Seed,	1.50
Interest on estimated value of land,	9.00
Cost of machine for sowing,	15.00
	\$73.50
Value of 811 bushels carrots at 40 cents per bushel,	\$324.40
Tops, estimated value,	4.60
	\$329.00

Balance over and above all expenses of labor, manure, seed, (which last is still on hand,) \$255.50

From this statement it will be seen that at 10 cents per bushel the cultivation of carrots is a saving business.

DON'T KILL YOUR BEES.

The bee and the silk worm are almost the only insects permanently useful to man, and it has always been a source of regret that the rich stores of the first could not in ordinary cases be obtained without the destruction of the owner. This difficulty can now be obviated in an easy manner.

Mr. Cotton lately read before the Ashmolean Society at Oxford some notices on bees, and his first position was, 'never kill a bee.' The bee owner has in the *fungus maximus*, or common puff ball, a powerful instrument ready to his hands, by which he is able to adopt a more humane and profitable mode of treatment. The smoke of this fungus when dried so as to hold fire, has a stupefying effect on bees, and renders them as harmless as brimstone does without any of its deadly effects. By means of this, weak swarms, which would not live through the winter, may be united to strong stocks. Mr. Cotton stated it as a fact borne out by experiment, that a hive thus doubled will not consume more honey in the winter than a stock in its natural state. This was discovered by a Swiss pastor, De Gelior. The additional heat seems to serve instead of additional food, to keep up the vitality of the half torpid bees. He recommends a cold, dry, dark room, the colder the better, as the best winter quarters for bees. They will consume less honey than if left on their summer stands, and will not be weakened by the loss of thousands, which tempted out by the premature warmth of some early spring day, are caught by the cold winds, fall to the ground, and never rise again. *Dryness*, however, is essential; and he described the principle of ventilation, or proper airing of the hives in summer, as the most valuable improvement in bee-keeping.

Every farmer should keep bees; a few swarms for his own use if no more. They cost little, forage wherever the wild flower grows, have no ideas of distinction in landed property, and furnish the individual who has a taste for studying the habits of insects, or observing the wonders of that power we call instinct, an ample field of surprise and gratification.—*Gene Farmer.*

From Evans' & Ruffy's Farmers' Journal.

ON PREPARING SEED WHEAT.

SIR: I last year informed you, that I had tried the steep for wheat, recommended by Sir John Sinclair, but not with complete success; yet, nevertheless, from what I then saw, I determined to give it another trial. From the observations I made at that time, I had reason to think that the quantity of sulphate of copper set down in Sir John's recipe, was not sufficient, and that a much larger portion would not be injurious to the wheat; but not wishing to run any risk, I determined to ascertain this previous to the arrival of the season for sowing. With this view I dissolved 1lb. of the sulphate in four quarts of water; I procured some seed wheat that was very much smutted;

one part of this I steeped in the solution twelve, and the other twenty-four hours: a small quantity of each was then sown; it came up well, and when it arrived at maturity this year, not a single grain of smut was to be found in it. Observing that so large a quantity did not affect the germination of the plant, I caused four pounds of the sulphate to be dissolved in a quantity of boiling water, to which, when a complete solution was effected, as much cold water was added as, when put into a proper vessel, would cover a bag of wheat six or eight inches; the grain was suffered to remain therein about one hour, and then quick lime was made use of as usual; when three or four bags had passed through the mixture, some more water, and 1lb. of the sulphate, were added, and so in continuation for every three or four bags until the water became foul, when a fresh portion was prepared, as in the first instance. The result has been, a crop entirely free from smut. The extent of land sown nearly forty acres, and it is the first time the same land has been free from this terrible disease for some years, although the salt steep has been heretofore uniformly resorted to. The cost of this preparation is a mere trifle, as the sulphate was charged to me only 8d. per lb. Having once succeeded, I mean to pursue the same course, and should I live so long, I will repeat to you the result, be it favorable or otherwise; for it is not by one or two successful experiments, at least in this case, we can determine upon the value of the method pursued.—I remain your's, respectfully,

NEMO.

Birmingham, Sept, 2, 1859.

FOR SALE,

Two superior DEVON bulls, 4 years old this spring, of the purest blood in the country. fine form and remarkably large. Any gentleman wishing to procure one will find it to his advantage to embrace the present opportunity, as they will be sold at the low price of \$100 each, deliverable in Baltimore.

Applications in writing, post paid, to be made to the subscriber.

EDWD. P. ROBERTS, Baltimore, Md.

may 29

3t

NEW BALTIMORE SEED STORE.

THE Subscriber having located himself in *Grant street, near Pratt, three doors in the rear of Dinsmore & Kyle's Grocery Store*, takes this early method of informing his friends and the public, that he has commenced the GARDEN AND FIELD SEED BUSINESS, and solicits a portion of public patronage. He has on hand and intends keeping, at all times, a constant and general assortment of the very best FIELD AND GARDEN SEEDS, a part of the latter, being of the last year's importation, and all the growth of 1837.

Also GARDEN AND FARMING TOOLS, of various kinds; a few barrels of ITALIAN Spring WHEAT; BADEN CORN, raised, and carefully selected by Col. Mercer—DUTTON; MANDAN; SIOUX; AND EARLY SUGAR CORN; CLOVER; TIMOTHY, ORCHARD, & HERD'S GRASS SEEDS; BUCKWHEAT; OATS; MILLET, WHITE DUTCH CLOVER; LUCERNE; TREFOIL; SAINFOIN, ENGLISH RYE GRASS, &c. &c.

Farmers, Gardeners, Merchants, Captains of Vessels, and others, are invited to give him a call, as they can be supplied not only with Field and Garden Seeds of all kinds, but also with PLOUGHS; HARROWS; STRAW CUTTERS; CORN SHELLERS; WHEAT FANS, WHEAT CRADLES, &c. &c., together with all other kinds of useful implements of Husbandry, manufactured and kept constantly for sale by John T. Durding & Co. at their Agricultural Store, also in Grant street. Orders for articles in the above line by mail or otherwise, shall be faithfully and punctually executed.

THOMAS DENNY,

Grant street, 3 doors in the rear of Dinsmore & Kyle's.

WATKINS' PATENT WHEAT FANS, HARVEST TOOLS, &c.

THE subscribers, being confident of the superiority of the Watkins' Fan have made arrangements with the Patentee to manufacture the article in this city.

The difficulty of procuring these fans from Washington county in this State, (where they were formerly manufactured) and the high price at which they were sold has much retarded their introduction in our immediate vicinity; they are now manufactured by us at a reduction of about 40 per cent. on original price, and made of warranted materials and by experienced workmen. The Riddles and Screen of this fan are operated upon by a simple crank motion, and the general construction of the fan is such as to give the wind a proper direction and great force on the riddles, thus enabling farmers to clean double the quantity of grain and put it in better order for market than can be done by those in common use. Our assortment of Fans and Harvest Tools are as follows, viz:

Watkins' Patent Fans	\$30.00
do do with unshipping heads	32.00
Common Crank Shake Patent Fans,	25.00
do do do with unship heads	27.00
do Dutch Fans,	20.00
Box Fans; a very complete fan and well suited for small farms,	16.00
Grain Cradles with 4 a 8 fingers and warranted	
Scythes attached,	4.00
do do with wire braces,	5.00
Grass Scythes and Sneaths, in complete order for mowing	2.25
Grain, Grass and Bramble Scythes,	
Sickles and Grass Hooks,	
Scythes Stones, assorted kinds, Ripes for whetting	
Grain Scythes,	
Horse and Hand Hay Rakes,	
Cydlers' Hammers,	
Hay Forks, of sizes suitable for making and pitching hay,	
Threshing Machines, &c.	

ALSO,

Corn and Tobacco Cultivators, Corn Harrows, Field and Garden Hoes, and as usual, a large assortment of IMPLEMENTS AND SEEDS, comprising nearly every variety used by the planter.

ROBERT SINCLAIR, Jr. & Co.

Light street near Pratt street wharf.

june 4

2t

GROUND PLASTER OF PARIS,

Of superior quality, in bbls. on hand and for sale by JONA. ELLICOTT & SONS,

may 8 3t

south end of Patterson st.

THE AMERICAN FARMER.

The proprietors of this paper have a few complete sets of this work on hand, which they will dispose of at the reduced price of \$50 a set.—They are half bound and comprise each 15 volumes. The American Farmer, it will be recollected, was the pioneer in agricultural improvement in this country, being established in 1819, by John S. Skinner, Esq., to whose talents and industry its pages are indebted for, perhaps, the most valuable collection of agricultural matter to be found in any work extant. Those who desire to possess themselves of this valuable work will make early application as the number for sale is very limited.

CONTENTS OF THIS NUMBER.

Agents in Washington, D.C. and Cecil, Md.—Notice of the annual exhibition of the Columbian Horticultural Society—do of the formation of an agricultural society in A. A. Co. Md.—the crops—potatoes—corn—maple sugar—a hand thrashing machine—poudre—letter to the editor—Columbian horticultural society—mangle wurtzel and ruta бага—silk culture—summer pruning—straw as a top-dressing for young clover—geologist's report, continued—things agriculturists want—culture of carrots—to preserve bees—on preparing seed wheat—price's current—advertisements.

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every Monday

	PER	FROM	TO
BEANS, white field,.....	bushel.	1 00	1 10
CATTLE, on the hoof,.....	100lbs	10 00	
CORN, yellow.....	bushel	72	73
White.....		68	71
COTTON, Virginia,.....	pound	9	11
North Carolina,.....	"	10	11
Upland,.....	"	9 1/2	11
Louisiana — Alabama.....	"	11	12
FEATHERS,.....	pound.	48	50
FLAXSEED,.....	bushel.	1 25	dull.
FLOUR & MEAL—Best wh. wh't fam.	barrel.	10 00	10 50
Do. do. baker's.....	"		
SuperHow. st. from stores.....	"	7 87	8 00
" wagon price,.....	"	7 37	7 50
City Mills, super.....	"	7 75	—
" extra.....	"	8 00	—
Sasquehanna,.....	"	8 00	—
Rye,.....	"	4 62	—
Kiln-dried Meal, in hhds.	hhd.	18 00	—
do. in bbls.	bbl.	3 50	—
GRASS SEEDS, wholes. red Clover,	bushel.		11 00
Kentucky blue.....	"	2 50	3 00
Timothy (herds of the north)	"	2 25	2 50
Orchard,.....	"	2 00	2 50
Tall meadow Oat,.....	"		3 00
Herds, or red top,.....	"	1 00	1 25
HAY, in bulk,.....	ton.	10 00	15 00
HEMP, country, dew rotted,.....	pound.	6	7
" water rotted,.....	"	7	8
Hogs, on the hoof,.....	100lb.	6 75	7 00
Slaughtered,.....	"		
Hops—first sort,.....	pound.	9	—
second,.....	"	7	—
refuse,.....	"	5	—
LIME,.....	bushel.	33	34
MUSTARD SEED, Domestic, —; blk.	"	3 50	4 00
OATS,.....	"	32	33
PEAS, red eye,.....	bushel.		1 12
Black eye,.....	"	1 00	1 12
Lady,.....	"		
PLASTER PARIS, in the stone, cargo,	ton.	3 75	—
Ground,.....	barrel.	1 50	—
PALMA CHRISTA BEAN,.....	bushel.		
RAGE,.....	pound.	3	4
RYE,.....	bushel.	88	94
Susquehanna,.....	"		none
Tobacco, crop, common,.....	100lbs	3 00	3 50
" brown and red,....	"	4 00	6 00
" fine red,.....	"	8 00	10 00
" wrappery, suitable	"		
for segars,.....	"	10 00	20 00
" yellow and red,....	"	8 00	10 00
" good yellow,....	"	8 00	12 00
" fine yellow,.....	"	12 00	16 00
Seconds, as in quality, ..	"		
" ground leaf,.....	"		
Virginia,.....	"	4 50	6 00
Rappahannock,.....	"		
Kentucky,.....	"	5 00	8 00
WHEAT, white,.....	bushel.	1 85	—
Red, best.....	"	1 70	1 80
Maryland inferior	"		
WHISKEY, 1st pf. in bbls.....	gallon.	34	35
" in hhds.....	"	32	—
" wagon price,.....	bbls		31
WAGON FREIGHTS, to Pittsburgh,	100 lbs	1 25	—
To Wheeling,.....	"	1 50	—
Wool, Prime & Saxon Fleeces,...	pound.	40 to 50	20 22
Full Merino,.....	"	35	40 18 20
Three fourths Merino,.....	"	30	35 18 20
One half do.....	"	25	30 18 20
Common & one fourth Meri.	"	25	30 18 20
Pulled,.....	"	28	30 18 20

MORUS MULTICAULIS TREES.

The subscriber has from 25,000, to 30,000 Morus Multicaulis trees now growing at his residence, with roots of 1, 2, and 3 years old, which will be ready for sale this fall, and which he will sell on moderate terms.

EDWARD P. ROBERTS.

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,.....	barrel.		
BACON, hams, new, Balt. cured....	pound.	12 1/2	13
Shoulders,.... do.....	"	11	—
Middlings,.... do.....	"	11	—
Assorted, country,.....	"	8 1/2	9 1/2
BUTTER, printed, in lbs. & half lbs.	"	20	25
Roll,.....	"	—	—
CIDER,.....	barrel.		
CALVES, three to six weeks old....	each.	5 00	6 00
Cows, new milch,.....	"	30 00	40 00
Dry,.....	"	12 00	15 00
CORN MEAL, for family use,.....	100lbs.	1 62	—
CHOP RYE,.....	"	1 50	1 60
EGGS,.....	dozen.	12 1/2	—
FISH, Shad, No. 1, Susquehanna,	barrel.	8 75	—
No. 2,.....	"	8 25	—
Herrings, salted, No. 1,.....	"	3 75	—
Mackerel, No. 1, ——— No. 2	"	10 00	12 00
No. 3,.....	"	—	—
Cod, salted,.....	cwt.	3 00	3 25
LARD,.....	pound.	9	10

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

		VIRGINIA.
U. S. Bank,.....	par	
Branch at Baltimore,.....	do	Farmers Bank of Virgi. 1 1/2
Other Branches,.....	do	Bank of Virginia,..... do
MARYLAND.		Branch at Fredericksburg, do
Banks in Baltimore,.....	par	Petersburg,..... do
Hagerstown,.....	3a	Norfolk,..... do
Frederick,.....	do	Winchester,..... do
Westminster,.....	do	Lynchburg,..... do
Farmers' Bank of Mary'd, do	do	Danville,..... do
Do. payable at Easton,....	do	Bank of Valley, Winch. par
Salisbury,..... 1 per ct. dis.	do	Branch at Romney,.... 1
Cumberland,.....	par	Do. Charlestown, par
Millington,.....	do	Do. Leesburg,.... do
DISTRICT.		Wheeling Banks,.... 3 1/2a
Washington,.....		Ohio Banks, generally 5a6
Georgetown,.....	Banks, 1p.c.	New Jersey Banks gen. 3
Alexandria,.....		New York City,..... par
PENNSYLVANIA.		New York State,..... do
Philadelphia,.....	par	Massachusetts,..... 1 1/2a2
Chambersburg,.....	3	Connecticut,..... 1 1/2a2
Gettysburg,.....	do	New Hampshire,.... 1 1/2a2
Pittsburg,.....	2 1/2	Maine,..... 1 1/2a2
York,.....	3	Rhode Island,.... 1 1/2a2
Other Pennsylvania Bks. 2		North Carolina,.... 5
Delaware [under \$5].... 4		South Carolina,.... 6a7
Do. [over 5]..... 1 1/2		Georgia,..... 8a10
Michigan Banks,..... 10		New Orleans,..... 8a10
Canadian do..... 10		

TO THE PUBLIC.

Try the New Agricultural Establishment in Grant-street, next door to Dinsmore and Kyle.

Every article warranted to be first rate. The subscribers, grateful for past favors, take this early opportunity of returning their thanks to their customers and the public in general, and beg leave to inform them that they are now provided with a very extensive stock of newly manufactured AGRICULTURAL IMPLEMENTS, suitable to meet the call of Farmers, Gardeners, Merchants, Captains of vessels, and others, viz: 1000 Ploughs, assorted sizes, from \$4 to \$15 each, comprising of the old common Bar Shear, Winand's Self Sharpener; Woods & Freeborn's patent, all sizes, "Davis," "Sinclair & Moore's" improved Hill Side Ploughs, highly esteemed for turning the furrow down hill, with wrought or cast shears; Wheat Fans, of various sizes and patterns, from \$15 to \$50 each, warranted to separate the garlic from the wheat; Corn Shellers, from \$12 to \$20; Cutting Boxes, from \$7 to \$50 each; Corn and Tobacco Cultivators, large and small; Expanding do., Wheat Cradles, warranted to have fingers of the natural growth, and Grass Scythes, &c. &c.; Castings, of all descriptions and patterns, by the lb. or ton, to suit customers, allowing a liberal discount to merchants buying to sell again—final which will be furnished on the most pleasing terms. I do every article warranted to be of the best quality, in

proportion to the cost price. All orders by mail or otherwise shall be duly attended to with the greatest despatch.

We would particularly call the attention of Country Merchants and others, wishing to purchase agricultural implements to sell again, to the fact, that we will furnish them with articles on better terms than they can be supplied at any other establishment in the city. Our assortment is complete and as varied as that of the most extensive concern in Baltimore.

We have also connected in its operations with the above branch of business a complete assortment of FIELD AND GARDEN SEEDS, kept by Thomas Denny—Also Garden and Farm Tools, of various sorts and of the choicest collection, which will enable our customers to have filled entire all orders in the Agricultural and Seed Departments. mh 26 JOHN T. DURDING & Co.

SUPERB DOUBLE DAHLIAS.

ALSO, GARDEN AND FLOWER SEEDS.

The subscriber offers for sale at his establishment the best collection of Double DAHLIAS offered to the public, and will warrant every root true to name and colour, but they are too well known to need any comment in their favor, as most all amateurs in the vicinity have seen them in bloom to their great satisfaction, so those who wish to have roots that are genuine, apply at the right place, and lower than any other in the city as to quality.

Besides he offers a general and good collection of Garden and Flower SEEDS, fresh imported, that cannot be raised to perfection in this country; he has selected from Europe, and will dispose of them on reasonable terms, with a general collection of Greenhouse, Herbaceous and hardy plants, also Bulbous Roots. Catalogues can be had at his establishment, corner of Pine and Lexington street, Baltimore, by

JOHN FEAST,
Florist & Seedsman.

FARMERS' REPOSITORY OF AGRICULTURAL IMPLEMENTS AND EASTMAN'S CYLINDRICAL STRAW CUTTERS IMPROVED.

THE Subscriber informs the public that he has secured by letters patent his late and very important improvements on his Cylindrical Straw Cutter, by which improvements they are made more durable and easier kept in order. All the machinery being secured to an iron frame the shrinkage, wear and decay of wood is avoided. The feeding part of his improved machine is upon an entire different principle from the former machine; far more durable, requiring neither skill or care to keep it in order. These machines are so constructed as to make the freight on them less than half what it cost to ship the former or wood machines, an important desideratum to purchasers living at a distance; and I now offer it to the public upon the credit of my establishment as the most perfect machine in existence for the same purpose. They are also adapted to cutting rags for paper making, and for cutting tobacco as manufactured by Tobacconists, &c.

I also keep these machines on hand made as heretofore with my new feeding machinery attached to them; and also a general assortment of Agricultural Implements, as usual. Elliott's Horizontal Wheat Fans, and Fox & Bolland's Threshing Machines are both superior articles.

My stock of Ploughs on hand are not equalled in this city either for quality, quantity, or variety. I have a large assortment of Plough Castings at retail or by the ton, and having an Iron Foundry attached to my establishment can furnish any kind of Plough or Machine Castings on reasonable terms and at a short notice.

All repairs done with punctuality and neatness. On hand, a few Patent Lime Spreaders, Horse Powers, &c. &c. Also just received, a fresh supply of Landreth's superior Garden Seeds. In store, superior Timothy and Orchard Grass Seed and Seed Oats. All implements in the agricultural line will be furnished by the subscriber, as good and on as reasonable terms as can be had in this city, with a liberal deduction to wholesale purchasers. Likewise will receive orders for Fruit Trees from Mr. S. Reeves' Nursery, New Jersey.

JONATHAN S. EASTMAN,
Pratt street, Baltimore,
Between Charles & Hanover sts

feb 20

A NEW-FOUNDLAND SLUT.

For sale, a large size Newfoundland Slut, of large size and very handsome. Her color is black. She is thoroughly broken to the gun, and in pup to a bull dog; price \$20. Enquire of the editor of the Farmer and Gardener, Baltimore, Md.

THE FARMER & GARDENER

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, E. F. ROBERTS AND SAMUEL SANDS—EDITED BY E. F. ROBERTS.

No. 7.

BALTIMORE, MD. JUNE 12, 1838.

Vol. V.

THIS publication is the successor of the late
AMERICAN FARMER,

and is published at the office, at the N. W. corner of Baltimore and North streets, over the Patriot office, at two DOLLARS AND FIFTY CENTS per annum, if paid within one month from the time of subscribing, or \$3 if after that time. All letters to be post paid.

BALTIMORE: TUESDAY, JUNE 5, 1838.

We are pleased to learn that there is an Agricultural Society organized at Bladensburg, Prince George's County, Md. The good work goes bravely on, and we trust we shall soon have to record the highly honorable fact, that every county in the State have similar institutions.

Cotton Crop of Alabama.—Alabama, which, a few years ago, grew not more than 10,000 bales of Cotton per annum, will produce this season, not less than 370,000 bales. The receipts of the present season at Mobile alone, are 304,728 bales. The total receipts last year were 232,685 bales. The value of the present crop is computed by the Mobile Examiner to be a fraction short of fifteen millions of dollars, estimating each bale at forty dollars. Alabama is now the greatest Cotton growing State in the Union.

With such crop and fair prices, Alabama will soon relieve herself from her present embarrassments, and march forth like a strong man full of vigour and strength; and richly does this young and enterprising State deserve the choicest favors of fortune.

THE RAISING OF POULTRY.

The annual mortality among poultry is a subject of general regret; but as we believe that preventive means may be used which in a great measure will save a large majority of those which otherwise would fall a sacrifice to those diseases which usually prey upon the feathered tribe, we will briefly suggest a few practical rules which, if adopted, we believe will answer the desired object.

1. All young chickens, ducks, and turkeys, should be kept under cover, out of the weather, during rainy seasons.

2. Twice or thrice a week, pepper, shallots, shives, or garlic, should be mixed up with their feed.

3. A small lump of *Assofatida* should be pla-

ced in the pan in which their water is given them to drink.

4. Whenever they manifest disease by the drooping of the wings or any other outward sign of ill health, a little *assofetida* broken into small lumps should be mixed with their feed.

5. Chickens which are kept from the dung-heap while young seldom have the gapes, therefore it should be the object of those who have charge of them so to confine the hens as to preclude their young from the range of the barn or stable yards.

6. Should any of the chickens have the gapes, mix up small portions of *assofetida*, *rheubarb*, and *pepper*, in fresh butter, and give each chicken as much of the mixture as will lie upon one-half the bowl of a small teaspoon.

7. For the *pip*, the following treatment is judicious. Take off the indurated covering on the point of the tongue, and give twice a day, for two or three days, a piece of garlic the size of a pea: if garlic cannot be obtained, onion, shallot or shives will answer: and if neither of these be convenient, two grains of black pepper, to be given in fresh butter will answer.

8. For the *snuffles*, the same remedies as for the *gapes* will be found highly curative; but in addition to them it will be necessary to melt a little *assofetida* in fresh butter, and rub the chicken about the nostrils, taking care to clean them out.

9. Grown up ducks are some times taken off rapidly by convulsions. In such cases, 4 grs. of *rheubarb* and 4 grs. *cayenne pepper* mixed in fresh butter should be administered. Last year we lost several by this disease, and this year the same symptoms manifested themselves among them; but we arrested the malady without losing a single duck by a dose of the above medicine to such as were ill. One of the ducks was at the time paralyzed, but was thus saved.

TO DESTROY SORREL.

Among the pests to which the farmer is subject, there is none more annoying or vexatious than *sorrel*. While, it exhausts the soil and impedes the progress of healthful and cleanly culture, it is utterly unfit for all purposes of food.

It is however fortunate for the husbandman that there is a remedy. *Lime* is its certain destroyer. —We say this from experience, having tested its efficacy the present season. We had a few acres infested with it much to our inconvenience: on a part of this we spread 66 $\frac{2}{3}$ bushels lime to the acre; on the balance we spread 200 bushels of ashes. The *sorrel* on the limed part has nearly disappeared, while on the portion on which ashes were spread, it is as thick as ever. We believe that 30 bushels of lime to the acre, judiciously spread, would sweeten and neutralize the acids of any soil sufficiently to prevent the growth of this pest.

We would respectfully ask our agricultural friends to favor us with communications upon any subject connected with the pursuits of husbandry. The pride of occupation should make each farmer emulous of subserving the interests of that greatest of all human employments, and how, we would ask, can he more effectually do so than by placing the results of his experience and practice before his brethren? It is useless for any farmer to say he has nothing to write about, as the fact stands opposed to such an assertion. There is no farmer, but has something to communicate if he would but bestir himself, that would prove highly interesting to hundreds of others. Why then should there be any hesitancy, when interest and patriotism combine in the appeal to each farmer to take up his pen and vindicate the honorable profession of his choice?

THE CROPS.

In speaking of the crops of *Buck's County*, Pa., a correspondent of the U. S. Gazette, under the date of June 2d, has the following cheering remarks, which with few exceptions, may be taken as a fair picture of the prospects of the farmers throughout the country:

Since my last to you, under date of the 14th ultimo, I have visited several of the neighboring townships in the county, and held conversations with our neighbors, who are all of opinion that the crops are in a most prosperous condition. The wheat and rye look as well as it ever has done at this season. The corn is not as far advanced as usual. The nights have been rather cool and uncongenial to its rapid growth. Pota-

toes have made their appearance through the earth, and present a prospect of abundance. We have had copious rains and warm sunshine during the last two weeks, which have given life and beauty to vegetation of every kind, and gladdened the hearts of our farmers to a degree of thankfulness beyond former years. Should kind Providence continue his goodness, and suffer the crops to progress without interruption to maturity, what an abundance will be gathered in—and how many thousands, nay millions, *should* rejoice, and offer up thanksgiving and prayer, that the harvest is home.

"Thou hast come again, oh summer; I feel thee in the breeze,
That warm and fragrant from the South is whispering through the trees;
I see thee in the varied hues of thickly springing flowers—
I hear thee in the song of birds, among the leafy bowers."
"Pass on thy way o'er all the earth, and visit every land,
To show the goodness and the power of an Almighty hand."

The same writer bears testimony to the great improvement which has taken place within the last four or five years, in the manner of farming, and thinks that the farmers of Buck's county can bear a comparison with any in the State of Pennsylvania.

We can most truly say that we are pleased to hear these good tidings, as with an onward march of improvement in the mode of cultivating the soil, there is no pecuniary difficulties, to which our country may be subjected, that our people cannot overcome.

INDUSTRIOUS HABITS.

Professor LIVES, of New Haven, makes the following instructive reference to the late President DWIGHT, in a recent address before a Horticultural Society;

"He had the largest garden, the best culinary plants, and the finest fruits in the city, and all cultivated by his own hands. This fact will excite surprise, when it is recollected that he delivered a lecture to his class six days in a week; performed the duties of Professor of Divinity, and superintended the government of the college. He demonstrated that an abundance of delicious fruit might be cultivated at a very little expense. He was a minute and accurate observer of the habits and laws of vegetables, and delighted in conversation to give or receive instruction in horticulture. He infused into his conversation music and poetry, and he was listened to with delight, even when his theme was cultivation of Cabbages. He taught that the proper time to prune fruit trees was in June, when the plant was in the most rapid growth; and the reason was that the wound would heal most readily at that season. Dr. Dwight was enabled to perform so much and so various mental labors, by invigorating his constitution by exercise in the open air. No one felt more strongly the sentiment of the poet:

"The idle is a watch that wants both hands,
As useless when it goes as when it stands.
Want of occupation is not rest;
A mind unoccupied is a mind distressed."

THE BEAVER.

To the editor of the Richmond Enquirer.

In one of the late Enquirers you ask for information relative to the beaver. I have now eight skins of beavers, killed in my plantation, on Notaway river, five miles above the great falls. The river is rated by an engineer as capable of boat navigation at small expense. Yet the beavers make dams across it—numbers of them, too, and, in many cases, fine tumbling dams. They destroy a considerable quantity of corn, cutting it off in the green state, while sweet and juicy. Your Surry correspondent shows chips and sticks; I can show small trees, that would make a good turn for a man, which they have cut down and carried to the water, twenty yards. Can you prevail on some of your Western readers to give us some information as to the mode of hunting and trapping them, the best baits, &c. &c.? And last, though not least, what are the skins worth?

Yours, &c.

R. M.

LUNENBURG, MAY 12, 1838.

We understand that beaver skins are sold in this city by the pound, and range in value according to the latitude in which they are caught. Western (Missouri, &c.) are worth - \$4, to \$5
Southern (Mississippi, &c.) - - \$2 to \$3
(We cannot yet quote Virginia skins.)
Skins will weigh from 1 to 4 lbs.

COLUMBIAN HORTICULTURAL SOCIETY.—The stated meeting of this Society, which was held last Saturday at the City Hall, was pretty well attended.

On motion of Mr. Barnard, the following resolution (to which we call the attention of cultivators in this and the neighboring counties) was unanimously adopted:

"Resolved, That from the proceeds of the ensuing exhibition, and other funds remaining in the hands of the Treasurer, after leaving a sum sufficient for ordinary expenses, there be appropriated an amount, not exceeding two hundred dollars, to be laid out in premiums, to be awarded to those persons who, during the two years including the next exhibition, have exhibited the most meritorious articles in the departments of flowers, fruits and vegetables."

We give the following extract from the report of the Committees on the Flowers and Fruits exhibited to the meeting:

Mrs. Suter presented a variety of flowers, and among them viburnum dulce, an uncommon variety of laurustinus, the Suter rose, a seedling climber, with very large flowers, a double yellow ranunculus, very pretty, and a great variety of fine hearts-ease, mignonette, and gilly flowers from seed presented by Dr. Balzer, very large and double.

Mr. Buist presented fine specimens of Wells' cabbage, China and King of Prussia rose, a beautiful gladiolus blandus and nevembeagia, filicantis, the latter a new plant.

Dr. Gunnell exhibited a great variety of Roses; among them, were Hogg's double yellow, cabbage monthly, very large, several varieties of tea, hybrid and garden roses, of which the bizarre incomparable, a very dark, almost purple rose, with a light centre, a fine garden variety; also, Lees's crimson perpetual, red garden, Harrison yellow, Jackson, old tea, superb tea, white tea, tea yellow

centre, compact tea, Orloff, Wells' cabbage, monthly cabbage, perpetual bourbon, and Herbemont carolina.

The Committee on Fruits reported the exhibition of fine ripe strawberries of the pine variety, from Gen. Towson.

Before the meeting adjourned (until next Saturday,) five new members were added to the Society.

PRUNING FRUIT TREES.

This operation is directed to be performed, by a writer in the Horticultural Register, in the winter. The common practice is to prune in the spring. Both we conceive to be wrong. It is unnecessary again here to repeat our reasons, for pruning at mid-summer, as we have already twice published them in the Cultivator. We will only add, that our opinion in this matter is fortified by the philosophy and practice of the late Rev. Dr. Dwight—(see last Cultivator)—and by four years' observation and practice in our own grounds. We prune in the last of June and first part of July. We earnestly recommend a trial of the practice.

The object of pruning are at least three fold.—We trim shade trees to produce symmetry of form. We trim forest trees to produce a handsome and valuable bole, or stem, for timber. And we prune fruit trees for the double purpose of giving them a good shape, and of inducing them to bear well. To the pomologist that shape is most handsome, in a fruit tree, which indicates the best bearing qualities. It is remarked, particularly of the apple, that upright shoots produce less abundantly than those which grow horizontal, or deviate materially from an upright form.—Hence in forming the head of a young apple tree, it is customary to take out the upright shoot, when the tree has attained a proper height, say 7 to 9 feet, and to leave three or four laterals or limbs to form the head. And as pruning does not increase the quantity of wood, but has a different tendency and effect, by lessening the leaves, which are the organs of nutrition, the upright shoot should not be taken out until the laterals have acquired considerable wood and foliage. In pruning fruit trees, all limbs which are likely to interfere with each other, should be taken out while they are small. The head of the tree should be kept open, so as to admit light and air, essential to the maturity of the fruit. In pruning all trees in the nursery, the limbs should be always upon one-third of the stem, that is, only two-thirds of the stem should be denuded limbs.

PREPARING CORN STUBBLE FOR THE PLOUGH.

As the season is approaching, in which farmers prepare their corn stubble for the succeeding crop, I propose throwing out a few hints on the subject of preparing it for ploughing—to be left in the best condition for receiving the seed of, and taking off, the following crop. Since experience has confirmed that cutting off corn at the ground, is preferable, in an economical point of view, to topping it above the ear—that method has generally been adopted by those farmers, who make economy a prominent article in their agricultural creed. It might be asked, what can be

done to make it in a better condition for ploughing, than by cutting the corn off at the ground? Farmers, try it for yourselves.

The object to be attained, is to prepare the stubble to be in such a condition, that most of it may be ploughed down; and being ploughed down, not to be drawn up again with the harrow, in putting in the following crop: In the practice of cutting off corn at the ground, unless more especial pains be taken, than is usually bestowed, a stubble of some six, eight, or ten inches will be left. In this case farmers sometimes scalp them off even with the ground with a hoe, to make it in a condition more suitable for ploughing.

Another method has been adopted by many farmers, which has been found to answer the purpose better than scalping. It consists in passing the harrow twice over a row, or in other words, *going a round to a row*. This should be done early in the spring before the ground becomes completely settled. Where both plans have been tried in the same, or adjoining fields, it has been found that that which was harrowed, the corn stubble ploughed down better—and those that were ploughed down, were less drawn up than where they were scalped. Hence, they would obstruct less in applying the seed, and taking off the crop. Again I would say, *farmers try it for yourselves.—Farmers' Cabinet.*

[From the Genessee Farmer.]

PROF. SILLIMAN'S JOURNAL—CUTTING TIMBER—INDIAN MOUNDS.

The last number of this excellent work, invaluable to the man of science, and an honor to the country, is now before us; filled with more than its usual variety of generally interesting articles, besides many belonging particularly to the cause of science alone. Among those intended for the general reader, we may mention the excursion to the White Mountains; the Notes respecting the Indian Mounds of Wisconsin; the Geology of Upper Illinois; and the Dry Rot.

The article on the Dry Rot, is from the pen of Mr. Rainey, of Middletown, Conn., a ship builder of considerable experience, and though relating primarily to that kind of architecture in wood, cannot fail to be valuable to all who are engaged in cutting timber for any purpose, where duration and preservation are desirable. Mr. Rainey having become convinced that the sap was the cause of the decay of wood, instituted a series of experiments to ascertain its place in different seasons of the year, and found that in the winter, the heart wood contained much more than the sap wood, while in the summer it seemed concentrated in the alburnum or outside layers of wood. It has been generally supposed that the sap of the tree was principally in the roots during the winter, and acting on this supposition, Mr. Rainey had preferred for ship building, timber cut in the winter; some cases, however, in which timber cut in the summer was used with that cut in the winter, and remained sound while the latter decayed, induced an investigation as to the cause, and resulted as stated. Mr. R. now uses timber cut as far from December as possible, and finds much less cause for complaint than formerly. The following was one of the experiments that led Mr.

R. to doubt the propriety of cutting timber in winter:—

"Having cut a small oak staddle, on or about the 20th of June, I placed several pieces of it in the fire place, and put a fire under them; after a little while there appeared at the end of the sticks a wet circle describing the exact thickness of the alburnum, or sap wood, and when they became considerably heated, the steam rushed with violence from the tubes of the sap wood, while there was but a small appearance of vapor from the heart wood. About the same day of December, of the same year, I had another small oak cut, and went through with the same process of heating several pieces of the wood; and when they began to be heated, the whole surface of the heart wood, except a small circle enclosing the pith, was wet, but the alburnum was dry, and when they were fairly heated through; the steam rushed with violence from the heart wood, though the whole quantity that escaped, was not so large as in the former case. The results of these experiments accord with a well known fact in regard to the sugar maple, namely, that no sap can be obtained from the tubes of the alburnum of the tree, and therefore they are obliged to bore a hole for the tube through the alburnum, into the heart-wood before it will run."

Mr. Rainey's inference as to the position of the sap during the severe weather of winter, is probably correct, as we have observed many appearances that would go to confirm it; but, that at the time of making sugar, the sap is found in the heart wood of the maple, is decidedly incorrect, as every person acquainted with the manufacture well knows. In many cases in tapping the trees, the heart wood is not touched at all, and it is deemed desirable to avoid it when practicable.—The sap of the maple will not, however, flow until the temperature of the earth and air has been raised by the sun of spring, and the circulation, which is partially or totally suspended in the alburnum during the severe frosts, is restored.—The relative position of the sap is consequently changed from what it was a few weeks previous, having passed from the centre to the surface through the lateral pores, or what is called the silver grain, as well as commenced its flow upwards to the expanding leaves and branches.

Farmers find the cutting of timber for posts and rails an important item in their profit or loss account; and if Mr. Rainey's experiments as to the duration of timber can be fully relied upon, or substantiated by further experience, a very great point in domestic farming economy would be gained. We think the early settlers of Western New-York could throw much light on this subject, by ascertaining the relative duration of their rail fences made from timber cut in the winter, or midsummer, as most farms must have had specimens of both kinds; and any notices of this nature, furnished us, shall be inserted with pleasure.

Mr. Taylor's notice of the Indian monuments and mounds of Wisconsin, is a very interesting article. The notices are mostly confined to the strip of territory through which the main Indian road from Lake Michigan, near Milwaukee, passes to the Mississippi, near Prairie du Chien; but this region furnishes a greater number, and probably more perfect specimens, of these monuments

of antiquity, than any other part of the Mississippi valley. That they are places of burial can no longer be doubted, as a number of large mounds were thoroughly opened the last season by order of Col. Pettival, the officer employed in surveying the Wisconsin River. They were uniformly filled with bones in the last stages of decomposition, the fibrous roots of the trees, and the coarse grass, penetrating and passing through their substance as through common earth.

But the thing that most interested us, as the fact was entirely new, was the manner in which these burial places, scattered in such countless numbers over the Wisconsin prairies, have been arranged to represent animals, birds, and even the human figure itself. The well executed drawings that accompany the article, make this plainer than words can do, and we think establish the truth of the supposition, that as particular animals were the badge or emblem of particular tribes, so in depositing the dead, these mounds were made to conform to the badge or *totem* of the tribe or individual, whether the same was the tortoise, buffalo, wolf, eagle or crane. In general, the configuration can easily be traced; and mingled with these representations of animals and birds, are works of a round or square form, and some parallelograms of nearly half a mile in length. The length of these representations of animals vary from 60 feet to 200, and rise above the level of the prairie from 5 to 10 feet. A mound which represented the human figure, was in one instance 125 feet long; from the extremity of one arm to the other 30 feet; the body 30 feet in breadth; the head 25 feet; and the elevation above the prairie 6 feet. The configuration was perfectly distinct, and Mr. Taylor says, there was no possibility of a mistake; in assigning the figure to the human race.

There seems scarcely a room for doubt, as to the fact that the great west has been the abode of populous and powerful nations; far more advanced in civilization than the roving hordes that now or lately wandered over this beautiful region; and those were compelled to give way to the pressure of these, as the latter seem destined to vanish before the rapidly advancing wave of civilization, and the encroaching march of the white men. Whether the gloom that shrouds these monuments of the past in such mystery, shall be penetrated, remains to be seen.

HUSBANDMEN,

AND THE HONOR PAID TO AGRICULTURE IN CHINA.

From Navarette, Le Comte, Du Halde, &c.

The husbandmen in China, as to rank, are preferred to merchants and mechanics. They are endowed with large privileges, their profession being considered as the most necessary one in a state. Navarette observes, that the Chinese say, that the Emperor ought to take them under his particular care, and to allow them as large privileges as may be; because all the empire subsists by their labor and industry. Nay, it could not subsist without the strongest inclination and application of the country-people that way! China being so vastly populous, that if every inch of arable land was sowed, as in fact it generally is yet the produce would be scarce sufficient to support the multitudes of inhabitants; and the en-

pire is too extensive to have its wants that way supplied from foreign parts, even if it kept up a correspondence with them. For these reasons, it has always been one of the chiefest cares of the government to promote agriculture, by honoring husbandmen and their profession. With this view, a festival is instituted in honor of agriculture; and the Emperor himself, once a year, turns ploughman, in imitation, as it is said, of the early monarchs, whose history seems to be calculated for the same end.

The common opinion, according to the missionaries, is, that husbandry was first taught by *Shin-nong*, who is at this day revered as the inventor of so useful an art; which has still gained farther credit from what is related in the books of their ancient philosophers. The Emperor *Yau*, who began to reign four hundred and eighty years after the monarch, it seems, set aside his own children in favor of a young husbandman, whom chose for his successor. This choice of an emperor out of the country, has inspired the Chinese with a great esteem for agriculture. *Yu*, who succeeded *Shun*, came to the throne after the same manner. It is said, he found out the way, by means of canals, to drain off the water into the sea, which at the beginning of the empire, overflowed several low countries, and afterwards made use of them to render the soil fruitful. It is added, that he wrote several books concerning the manner of cultivating land, and watering it, which induced *Shun* to appoint him his successor, and has contributed much to raise the credit of agriculture, as they see it has been thought worthy the care and application of a great prince.

Several other emperors have expressed their zeal for this art. *Kang Vang*, third monarch of the *Chew* family, caused land-marks to be fixed, to prevent disputes among the husbandmen. *King-Ving*, the twenty-fourth of the same race, in whose reign *Confucius* was born, five hundred and thirty-one years before Christ, renewed the laws that had been made for promoting agriculture. In a word, the emperor *Ven-ti*, who reigned three hundred and fifty-two years after, raised its esteem to a great pitch: for this prince perceiving that his country was ruined by the wars, to engage his subjects to cultivate the land, set them an example himself, by ploughing the fields belonging to his palace: which obliged all the ministers and gentlemen of his court to do the same.

It is thought, that this was the original of a great festival that is solemnized every year in all the great cities of China, when the sun enters the fifteenth degree of aquarius; which the Chinese look upon as the beginning of the spring. On this day the governor comes out of his palace, carried in his chair, preceded by banners, lighted torches, and divers instruments; he is attended with several litters, painted and adorned a variety of silk tapestry; exhibiting various figures, and the portraits of illustrious persons who had practised husbandry, with histories relating to the same subject! He is crowned with flowers, and marches in this equipage, towards the eastern gate of the city, as it were to meet the spring.

Among the figures, there is a cow of earthenware, so monstrously large, that forty men can hardly carry it. Behind the cow, whose horns are gilt, is a young child with one foot naked and the other shod: him they call the *genius of labor*

and diligence; who strikes the earthen cow incessantly with a rod, as though it were to make it advance. All the husbandmen follow with their instruments; after whom proceed companies of masquers and comedians, acting plays. In this manner they march to the governor's palace, where they strip the cow of her ornaments; and drawing out of her belly a prodigious number of small cows made of clay, distribute them among the multitude, as well as the fragments of the cow, which they break into pieces. Afterwards, the Governor makes a short discourse, recommending the care of husbandry as one of the things most conducive to the good of a state.

The attention of the emperors and mandarins to the cultivation of the land is so great, that when deputies arrive at court from the vice-roys, the Chinese monarch never forgets to demand in what condition the fields appeared to them; and the falling of a seasonable shower furnishes a proper occasion for visiting a mandarin, to compliment him thereupon. Every year, in spring, which falls in February, the emperor (according to the ancient custom,) goes himself, in a solemn manner, to plough a few ridges of land, in order to animate the husbandmen by his own example; and the mandarins of every city performed the ceremony, which is as follows:—The tribunal of mathematics having, pursuant to order, fixed on the twenty-fourth of the second moon, as the proper day for the ceremony of the tillage, that of the rites gave notice to the present emperor *Yong-Ching*, by a memorial which set forth the following particulars to be observed by him, preparatory to this festival. 1st. That he should appoint twelve illustrious persons to attend and plough after him, viz: three princes, and nine presidents of the sovereign courts; or the assistants of the latter, in case they were too old, or infirm. 2nd. That as this ceremony does not solely consist in the emperor's ploughing the earth, in order to stir up emulation by his own example; but also includes a sacrifice, which he, as chief pontiff, offers to *Shang-ti*, to procure plenty from him in favor of the people; therefore, by way of preparation, he ought to fast and observe continence the preceding days; the princes and mandarins, who accompany his majesty, ought to prepare themselves in the same manner. 3rd. That on the eve of the ceremony, his majesty is to send several lords of the first quality, to the hall of his ancestors, to prostrate themselves before their tablet, and give them notice, as though they were yet living, that the next day he will offer the great sacrifice.

Besides these directions to the emperor, the tribunal likewise prescribes the preparations to be made by the different tribunals; one is obliged to prepare the sacrifice; another to compose the formula; another to carry and set up the tents, under which his majesty is to dine, in case he so orders it; a fourth is to assemble forty or fifty husbandmen, venerable for their age, who are to be present when the emperor ploughs the ground, with forty of the younger sort to make ready the ploughs, yoke the oxen, and prepare the grain that is to be sown; consisting of five sorts, supposed to comprehend all the rest, as wheat, rice, beans, and two kinds of millet.

On the twenty-fourth day of the moon, the emperor went with his court, in his habit of cere-

mony, to the place appointed, to offer to *Shang-ti* the spring sacrifice; by which he is implored to increase and preserve the fruits of the earth. The place is a little hillock made of earth, a few furlongs south from the city; on the side of this elevation, which ought to be fifty feet four inches high, is the spot which is to be ploughed by the imperial hands.

After the emperor had offered sacrifices, he descended with the three princes and nine presidents, who were to plough with him. Several great lords carried the valuable chests, which contained the grains that were to be sown. All the court attended with profound silence; then the emperor took the plough and tilled the ground several times backwards and forwards; when he quitted it, a prince of the blood held it and ploughed; as did all the rest in their turns. After having ploughed in several places, the emperor sowed the different grain; and the day following, the husbandmen by profession, (forty-four of them old, and forty-two of them young,) finished the remainder of the field that was left untilled. The ceremony concluded with the appointed reward, which the emperor bestowed upon each of them; consisting of four pieces of dyed cotton to make cloths.

The governor of *Pe-King* goes often to visit this field, which is cultivated with great care; and examines all the ridges thoroughly, to see if he can meet with any uncommon ears, such as they reckon good omens; on which occasion he gives notice, that he found a stalk, for instance, that bore thirteen ears. In the autumn the same governor gets in the grain in yellow sacks; which are stowed in a granary built for that purpose, called the *Imperial Magazines*. This grain is kept for the most solemn ceremonies; for when the emperor sacrifices to *Tyen*, or *Shang-ti*, he offers it as the fruit of his own hands; and on certain days in the year, he presents it to his ancestors, as if they were still living.

Among several good regulations made by the same emperor, he has shown an uncommon regard for the husbandmen. To encourage them in their labor, he has ordered the governors of all the cities to send him notice every year, of the person of this profession, in their respective districts, who is most remarkable for his application to agriculture; for unblemished reputation; for preserving union in his own family and peace with his neighbours; for his frugality and aversion to extravagance. Upon the report of the governor, the emperor will advance this wise and diligent husbandman to the degree of a mandarin of the eighth order, and send him patents of an ordinary mandarin; which distinction will entitle him to wear the habit of a mandarin, to visit the governor of the city, to sit in his presence, and drink tea with him. He will be respected all the rest of his days. After his death he will have funeral obsequies suitable to his degree; and his title of honor shall be written in the hall of his ancestors. What emulation must such a reward excite among the husbandman!

Accordingly we find that they are continually busied about their lands; if they have any time to spare, they go immediately to the mountains to cut wood; to the garden to look to their herbs, or to cut canes, &c., so that they are never idle. The land in China never lies fallow. Generally

the same ground produces three crops in a year; first rice; and before it is reaped they sow fitches; and when they are in, wheat, beans, or some other grain; thus it goes continually round. They very seldom employ their land for unprofitable uses, such as flower gardens, or fine walks; believing useful things more for the public good, and their own.

The attention of husbandmen is chiefly employed in the cultivation of rice. They manure their land extremely well; gathering for that purpose, with extraordinary care, all sorts of ordure, both of men and animals, or truck for it wood, herbs, or linseed oil. This kind of manure, which elsewhere would burn up the plants, is very proper for the lands of China; where they have an art of tempering it with water before they use it. They gather the dung in piles, which they commonly carry covered on their shoulders; and this contributes very much to the cleanness of their cities, whose filth is thus taken away every day.

In the province *Chy-Kyang*, and other places, where they sow rice, they use balls of hog's, or even human hair: which, according to them, gives strength to the land, and makes that grain grow better. For this reason, barbers save the hair which they cut off the heads, and sell for about a halfpenny a pound to such people, who carry it away in bags; and you may often see barks loaded with it. When the plant begins to ear, if the land be watered with spring water, they mix quicklime with it; saying that it kills worms and insects, destroys weeds, and gives a warmth to the ground, which contributes much to fertility. By this means the rice fields are so clean, that Navarette, sometimes, walked through them, looking for some small herb; and could never find any: so that he concludes, the rice which is surprisingly tall and fine, draws all the nourishment from the ground.

The husbandmen sow their grain at first without any order; but when it has shot about a foot, or a foot and a half high, they pluck it up by the roots; and making it into a sort of small sheaves, plant it by a line, and checkerwise; to the end, that the ears, resting upon each other, may stand more firmly, and resist the winds. But before the rice is transplanted, they level the land, and make it very smooth, after the following manner. Having ploughed the ground three or four times successively, always to the ancles in water, they break the clods with the head of their mattocks; then, with the help of a wooden machine (on which a man stands upright, and guides the buffalo that draws it,) they smooth the earth, that the water may be every where of an equal height; inasmuch that the plains seem more like vast gardens than open fields.

The mountains in China are all cultivated; but one sees neither hedges nor ditches, nor scarce any tree; so fearful they are of losing an inch of ground. It is very agreeable to behold, in some places, plains three or four leagues in length, surrounded with hills and mountains, cut from bottom to top, into terraces three or four feet high, and rising one above another, sometimes to the number of twenty or thirty. These mountains are not generally rocky, as those in Europe, the soil being light and porous, and so easy to be cut in several provinces, that one may dig three or four hundred feet without meeting with the rock.

When the mountains are rocky, the Chinese loosen the stones, and make little walls of them to support the terraces; they then level the good soil and sow it with grain.

They are still more industrious. Though in some provinces, there be barren and uncultivated mountains, yet the valleys and fields which separate them in a vast number of places, are very fruitful and well cultivated. The husbandman first levels all the unequal places that are capable of culture. He then divides that part of the land, which is on the same level, into plots; and that along the edges of the valleys, which is unequal, into stories, in from of an amphitheatre: and as the rice will not thrive without water, they make reservoirs, at proper distances, and different heights, to catch the rain and the water which descends from the mountains, in order to distribute it equally among their rice plots; either by letting it run down from the reservoir to the plots below, or causing it to ascend from the lower reservoir to the highest stories.

For this purpose they make use of certain hydraulic engines, which are very simple, both as to their make and the manner of playing them. It is composed of a chain made of wood, resembling a chaplet or pair of beads, strung as it were with a great number of flat boards, six or seven inches square, and placed parallel at equal distances.—This chain passes through a square tube or gutter: at the lower end whereof is a smooth cylinder or barrel, whose axis is fixed in the two sides: and to the upper end is fastened a sort of drum, set round with little boards to answer those of the chain, which passes round both it and the cylinder; so that when the drum is turned, the chain turns also; and, consequently, the lower end of the gutter or tube being put into the water, and the drum end set to the height where the water is to be conveyed, the boards filling exactly the cavity of the tube, must carry up a continual stream so long as the machine is in motion; which is performed in three ways:—1st. With the hand by means of one or two handles applied to the ends of the axis of the drum—2nd. With the feet, by means of certain large wooden pegs, about half a foot long, set round the axletree of the drum for that purpose. These pegs have long heads, rounded on the outside, for applying the soles of the naked feet; so that one or more men, may with the greatest ease put the engine in motion, either standing or sitting; their hands being employed all the while, the one holding an umbrella, and the other a fan. 3rd. By the assistance of a buffalo, or some other animal made fast to a great wheel, about four yards in diameter, placed horizontally. Round its circumference are fixed a great number of pegs or teeth; which tallying exactly with those in the axletree of the drum, turn the machine with a great deal of ease.

When a canal is to be cleansed, which often happens,—it is divided, at convenient distances, by dikes; and every neighbouring village, being allotted its share, the peasants immediately appear with their chain engines; whereby the water is conveyed from one to the other. This labor, though painful, is soon ended by means of the multitudes of hands. In some parts, as the province of *Fo-Kyen*, the mountains, though not very high, are contiguous, and with scarce any valleys between; yet they are all cultivated by

the art which the husbandmen have to convey the water from one to the other through pipes made of bamboo.

To this surprising industry of the husbandmen, is owing that great plenty of grain and herbs, that reigns in China above all other regions.—Notwithstanding which, the land hardly suffices to support its inhabitants; and one may venture to say, that to live comfortably they have need of a country as large again.

GEOLOGICAL SURVEY OF MARYLAND.

BY PROFESSOR DUCATEL.

Sec. 11.—Geological Examination of Cecil Co.

(CONTINUED.)

Another valuable mineral found in the county, and which has not yet attracted the attention it merits is the *kaolin* or porcelain clay. It was stated in a former report that partial beds and veins of it had been seen in the coarse grained *granite*, occurring near the head of the Big Elk in the neighborhood of Miss Dysart's. During the excursions of the past year a locality has been met with where it occurs of great purity, and it is said, in a bed of some extent. Mr. Joseph Preston, upon whose farm the mineral is found, informs me that he had sent a quantity to the Porcelain works recently in operation at Philadelphia, and that it was pronounced of superior quality. It has been used in the construction of the furnaces attached to the Rolling-Mill on the Octorara, having been found to make a most refractory cement. Its usefulness might be extended by mixing it with the pure kinds of potter's clay as a basis for the more ordinary sorts of ware.

I have to regret that it is not in my power to report the occurrence of limestone within the region of country now under consideration. There is still, however, room to hope that bands of limestone exist here as elsewhere, with its usual associates of *gneiss* and *soapstone* rocks. On the farm of Mr. James Egan at the head of Principio creek, the water of a well sunk to the depth of thirty feet is strongly charged with the bicarbonate of lime, which it copiously deposits as a carbonate when boiled, coating the inside of the vessels with a thick crust. Well-water of a similar character occurs on the premises of Mr. Ely Haynes, in the vicinity of the Rising Sun. It is not improbable, therefore, that some wedges of limestone may yet be found between the strata of *gneiss* rocks of the surrounding country; and as the farmers here, fully appreciate the value of *lime* as an agricultural resource, since they are now willing to obtain it from Chester county, Pa. at considerable labor and cost, it is to be hoped that our expectations will not be disappointed. I was desirous, during the past year, to have commenced a systematic search for this valuable rock. but was prevented by a sudden indisposition; and the discharge of my duties in other portions of the State made it impracticable for me to return a second time to the county. I propose doing so early in the ensuing season.

Having thus indicated the leading features in the geology of the county, and furnished an account of the various mineral resources it contains, I may now revert to the use of the greensand and *black marl*, as great agricultural resources pos-

sessed by the farmers of Sassafras Neck and the Bohemia Manor.

In tracing out the history of the discovery and of the use of these materials. I find, as might naturally have been expected, that they have at various times fixed the attention of persons who have been induced to try them. The peculiar aspect of these deposits, filled with shells of an anomalous shape, totally unlike those that now inhabit our waters, could not fail to excite the curiosity of the observer, and the most obvious use that would suggest itself to which they might be applied was to the soil as a manure. Accordingly they have been tried, and although only on a small scale and very partially, the result are fortunately such as to relieve them from the imputation that their value is predicated solely upon theory.

✦ The first experiment that appears to have been made with the *Black Marl* was on a farm now in the possession of Mr. Seaverson. The spot was indicated to me by Mr. John W. Comegys, who, upon describing to him the material, recollected that something answering the description had been used upwards of twenty years ago, and that its effects were still visible. I rode to this farm on the afternoon of the 5th of August, in company with Commodore Jones. The marl was found to consist of a micaceous black sand filled with marine fossils, principally *gryphææ* and casts of the *cucculæa Mortonii*, and effervesced briskly in vinegar. No account could be given of the quantity or mode in which it had been applied; but there could be no doubt that the spot where it was used manifested a decided improvement in the character and luxuriance of its vegetation. An experiment more recently made on an adjoining portion of the same field, gave equal evidences of amelioration, in the production of a well set sward of white clover, of which not a solitary sprig was to be seen elsewhere.

Another experiment, also of ancient date, seems to have been made at the head of the Big Bohemia. The material employed here is a ferruginous sand, with a very trifling intermixture of green particles, containing numerous disintegrated shells of the *terrebracula Hariani*. It was applied to a poor adjoining field, many years ago, which to this day produces better crops than any of the surrounding ones. But the most satisfactory evidence of the *black marl* is to be seen on the farm of Mr. George Turner, at the head of a branch emptying into the Sassafras. The material here is a micaceous black sand, containing numerous marine shells, among which the *gryphææ* are most abundant. It was applied to that part of a barren knoll embraced with in an enclosed field under cultivation, the remainder of the knoll forming part of a waste field. The effect was to produce a luxuriant and well set growth of clover where the marl had been applied, that very forcibly contrasted with the adjoining portion, whilst this served to show the original barrenness of the whole. These experiments sufficiently attest the value of the *Black Marl*.

In giving directions for the use of a similar material that occurs in Kent county, I have advised that, before its application, it should be exposed for one season. The same precaution does not appear to be necessary for most of the marls of Cecil, as they have been observed to contain a

greater number of shells, consequently more calcareous matter, and less of the sulphuret of iron. It is only in those places where this mineral, which by its decomposition and recombinations gives rise to the production of an injurious acid, occurs in notable quantities, that such an exposure can be required. In its most usual condition, it may be applied with safety in the quantity of three hundred bushels to the acre. But, as in many situations it contains large, thick and harsh shells, that have as yet undergone but little disintegration, it might be advisable to separate these, and, when they have accumulated to a sufficient amount, burn them into lime. The friable portions of the marl have been found to contain from 20 to 30 per cent. of carbonate of lime.

The *Black Marl* has been observed in Sassafras neck, at the head of Back creek; at the bottom of a ravine in Rich neck, where it is covered by gravel and soil to the depth of ten feet; at the heads of bianches making into St. Alban's and Captain John's creek; those of Scotchman's creek; and most of the streams emptying into the Bohemia. In Bohemia Manor, it occurs on the Bayard Estate, adjoining the Ferry, and in most of the branches making into the river. Pits of it have been opened on the widow Bryan's farm, and by Mr. Albert Bryan, near Concord. At the former place, it has been used under the direction of Mr. John W. Tarbutton, and at the latter by the proprietor—in both instances with complete success. Mr. Albert Bryan offers to dispose of it to his neighbors at 20 cents per load, which it is fully worth.

The *Greensand*, in its pure state, containing fossils, occurs at the head of Sassafras, and may possibly also be found towards the head of the Bohemia. In the vicinity of Warwick, on the farm of Mr. Lockwood, a mixed article occurs, which it is believed might be beneficially applied. A mixed greensand is found, too, in Pond neck, and in other portions of the county.

There can be no necessity of urging the intelligent farmers of Cecil to the fruition of these invaluable resources, by means of which, together with the other natural advantages of the county, it can be made one of the most flourishing in the State. Its peculiar position—at the head of the Bay—intersected by water courses—traversed by the canal and rail road, and thus possessed of every facility for the transportation of its various productions—midway between two large cities, either of which, for social intercourse, can be reached in a very few hours—it presents itself under a remarkably favorable aspect to those who are desirous of retiring upon a farm, or of founding landed estates. There can be no doubt that the prices at which lands have recently been sold in Cecil are much below their intrinsic value; and, without desiring to create or to encourage an unwholesome spirit of speculation, by affixing a nominal value to them, that would be more injurious than beneficial to the prosperity of the county, they may be safely recommended to those who are willing to invest their funds in this way, provided they be improved forthwith by means of those natural resources which they contain within themselves, or are within their reach.

Before concluding the account of the mineral resources of Cecil county, it should be stated that beds of several varieties of clays and ochres occur

on the banks of the Bohemia, those of Cap. John's creek, and of the Sassafras, which promise to furnish valuable materials to an extensive branch of our domestic industry. Specimens collected from various localities, together with some of apparently superior quality, forwarded by Dr. Reed Pearce from Cap. John's creek, have been placed in the hands of a skilful and intelligent manufacturer in Baltimore, who has kindly consented to give them a full trial, the result of which has not yet been obtained, but will be communicated in proper time to those more immediately interested, as well as eventually to the public. It may be well to mention in this place that more attention should be paid these deposits of clays than has hitherto been done, as they are likely to be soon in great demand for the manufacture of *stoneware*, which is daily growing in importance to the city and to the State.

Bog ore of good quality occurs on Mr. Henry Fisher's farm, at the head of Sassafras, where the color of the waters indicates that it probably exists in large quantity, and in the neighborhood of Warwick, on the farm of Mr. Lockwood, where specimens were obtained whose specific gravities were found to vary from 2.5 to 3. They were free from any *phosphate of iron*, and their fracture possessed a semi-metallic lustre. They would probably yield from 25 to 30 per cent. of iron.

(To be Continued.)

From the Genesee Farmer.

MANURES.

Perhaps there is no point which more strongly marks the difference between the old husbandry, and the new, than the increased formation and application of manure; and there is no one which more clearly evinces the superiority of the latter; since, however wide the chemist and the farmer may differ as to the food of plants, all are agreed that animal manures furnish it the greatest quantity, and that the productiveness of cultivated land is in a great measure determined by the quantity of manure applied. Under the improved system of a rotation of crops, root culture, and alternation of grass and grain, combined with yard and stall feeding of sheep and cattle, the quantity of manure produced on the same farms has in many instances been quadrupled, and the amelioration of the soil has been in the same proportion.

The value of the manure produced in Great Britain taken in connection with her agriculture, may be seen from the fact that it is estimated by McCulloch at about 250 millions of dollars, while the whole of the cotton manufacture of the kingdom is only about 230 millions; and if it is not rated as high in the United States, it is because so much of our country has been but lately brought into cultivation, and its necessity and value is therefore not felt or appreciated.

In this country, it is where manure has been used the longest that its value is best understood, and the greatest efforts made to procure it for application to the soil; but even in these places the means of increasing the quantity that should be applied to the land, that are adopted by European nations, would be considered at present as burdensome and non-paying. Ship loads of bones have been carried from this country to Europe to be crushed and used as bone dust in fertilizing

their soils; and we have been compelled to purchase at exorbitant prices of those nations, the wheat and other grain, that this same manure would have produced at home, and at the same time have lost to our farms the fertility it would have imparted.

Long Island, that part of it in particular lying near New-York, has long and justly been considered the most fertile spot and the one that best pays for cultivation, of any in the United States. To what is this fertility owing? Not to the natural qualities of the soil, for in these it is far inferior to many in other sections of the country; not altogether to improved method of tilling, or the advantages of market, though these must have had their influence in stimulating industry;—but mainly to an increased attention to the production, purchase, and application of manures. The sweepings of the streets and the manure from the city stables,—the leached ashes from the country on both sides of the North river,—the ashes and refuse from the soap boilers' manufactories, wherever they could be procured on the Atlantic coast without regard to distance,—the lime and marl of New Jersey, and the treasures of the deep in the shape of the Manhaden or Mossbunker fish, have all been called in requisition, and the result has been, that in productiveness, that Island may be considered the garden of America.

It is true that the farmers of Long Island, as well as those in the neighborhood of other cities and villages, have neglected, or been ignorant of one of the most powerful of manures, poudrette or prepared night soil; and in consequence have suffered immense loss; but since the attention of men of science has been turned to the subject of the best methods of preparing and applying manures, it is probable the advantages to be derived from this new source will not longer be overlooked.

But whatever improvements or discoveries may be made, it seems clear that the farmer for manure must rely mainly on his stables and yards, and his study should be to render them the most efficient and available. One main object should be to prevent the escape of the liquid and volatile parts of the manure, as experience proves that these are the most active in exciting or supplying plants with food and thus accelerating their growth. The yards and the stables should be provided with litter, such as straw, hay, leaves, &c. with vegetable mold or muck, with the wash of roads or the overflowing of streams, in sufficient quantities to absorb and retain the urine and other liquid parts of the manure, and where these cannot be obtained, common earth or dry sand will be found of great utility in preventing the loss which must ensue where these parts of the manure are allowed to escape from the yard. If when the farmer cleans out his yards, he were to cover them with a hundred loads of vegetable or absorbent earth, he would find in the following year a greater number of loads of the most valuable manure, the greater part of which without such precaution would have been wholly lost.

It appears to be a well established rule, that manure to produce the most benefit, should be applied unfermented, and the decomposition take place in the earth. That rotted manure may afford at times more benefit to a particular crop, or that it may not be more conveniently applied to some crops, is not denied; but as a general and reasona-

ble rule it may be asserted that manure should be rotted in the ground where it is wanted. Some crops are rarely injured by any quantity that can be given them, as corn, potatoes, and roots generally, of course such should have the advantages of the first process of decomposition in the manure while its after effect is reserved for the grains and grasses. Heavy manuring of the grains, especially the spring ones, is more apt to produce lodged straw, than full berry, a result rarely felt when it is applied first to hoed crops, and the first fermentation has passed away.

QUALITY OF MILK DURING THE PROCESS OF MILKING.—Several large coffee-cups having been successively filled from one cow, till she was quite dry, the following results appeared: great care being taken to weigh the cups to ascertain that they held exactly the same quantity:—In every case the quantity of cream was found to increase in proportion as the process of milking advanced. In different cows the proportion varied, but in the greater number the excess of cream in the last cup, as compared with the first, was sixteen to one—in some it was not so considerable; therefore, as an average, it may be called as ten to twelve to one. The difference in the quality of the two sorts of cream was no less striking: the cream given by the first drawn milk was thin, white, and without consistence, while that furnished by the last was thick, buttery, and of a rich color. The milk remaining in the different cups presented similar differences: that which was drawn first was very poor, blue, and had the appearance of milk and water: that in the last cup was of a yellowish hue, rich, and to the eye and taste, resembled cream rather than milk. It appears, therefore, from these experiments, that if later drawing seven or eight pints from a cow, half a pint remains in the teats, not only almost as much cream will be lost as the seven or eight pints will furnish but that of the best quality, and which gives the richest taste and color to butter. This fact has been corroborated by chemical experiments, and holds good with respect to goats and asses.—*Blacker's Essay on the Improvement of small Farms.*

FOR SALE,

Two superior DEVON bulls, 4 years old this spring, of the purest blood in the country, fine form and remarkably large. Any gentleman wishing to procure one will find it to his advantage to embrace the present opportunity, as they will be sold at the low price of \$100 each, deliverable in Baltimore.

Applications in writing, post paid, to be made to the subscriber.

EDWD. P. ROBERTS, Baltimore, Md.
may 29 3t

NEW BALTIMORE SEED STORE.

THE Subscriber having located himself in Grant street near Pratt, three doors in the rear of Dinsmore & Kyle's Grocery Store, takes this early method of informing his friends and the public, that he has commenced the GARDEN AND FIELD SEED BUSINESS, and solicits a portion of public patronage. He has on hand and intending, at all times, a constant and general assortment of the very best FIELD AND GARDEN SEEDS, a part of the latter, being of the last year's importation, and all the growth of 1837.

Also GARDEN AND FARMING TOOLS, of various kinds; a few barrels of ITALIAN Spring WHEAT; RADEN CORN, raised, and carefully selected by Col. Mercer—DUTTON; MANDAN; SIOUX; AND EARLY SUGAR CORN: CLOVER; TIMOTHY, ORCHARD, & HERD'S GRASS SEEDS; BUCKWHEAT;

OATS; MILLET, WHITE DUTCH CLOVER; LUCERNE; TREFOIL; SAINFOIN, ENGLISH RYE GRASS, &c. &c.

Farmers, Gardeners, Merchants, Captains of Vessels, and others, are invited to give him a call, as they can be supplied not only with Field and Garden Seeds of all kinds, but also with PLOUGHS; HARROWS; STRAW CUTTERS; CORN SHELLERS; WHEAT FANS, WHEAT CRADLES, &c. &c., together with all other kinds of useful implements of Husbandry, manufactured and kept constantly for sale by John T. Durdin & Co. at their Agricultural Store, also in Grant street. Orders for articles in the above line by mail or otherwise, shall be faithfully and punctually executed.

THOMAS DENNY,
Grant street, 3 doors in the rear of Dinsmore & Kyle's

WATKINS' PATENT WHEAT FANS, HARVEST TOOLS, &c.

THE subscribers, being confident of the superiority of the Watkins' Fan have made arrangements with the Patentees to manufacture the article in this city.

The difficulty of procuring these fans from Washington county in this State, (where they were formerly manufactured) and the high price at which they were sold has much retarded their introduction in our immediate vicinity; they are now manufactured by us at a reduction of about 40 per cent. on original price, and made of warranted materials and by experienced workmen. The Riddles and Screen of this fan are operated upon by a simple crank motion, and the general construction of the fan is such as to give the wind a proper direction and great force on the riddles, thus enabling farmers to clean double the quantity of grain and put it in better order for market than can be done by those in common use. Our assortment of Fans and Harvest Tools are as follows, viz:

Watkins' Patent Fans	\$30.00
do do with unshipping heads	32.00
Common Crank Shake Patent Fans,	25.00
do do with unship heads	27.00
do Dutch Fans,	20.00
Box Fans; a very complete fan and well suited for small farms,	16.00
Grain Cradles with 4 or 8 fingers and warranted	
Scythes attached,	4.00
do do with wire braces,	5.00
Grass Scythes and Sneaths, in complete order for mowing	2.25
Grain, Grass and Bramble Scythes,	
Sickles and Grass Hooks,	
Scythes Stones, assorted kinds, Ripes for whetting	
Grain Scythes,	
Horse and Hand Hay Rakes,	
Cradlers' Hammers,	
Hay Forks, of sizes suitable for making and pitching hay,	
Threshing Machines, &c.	

ALSO,

Corn and Tobacco Cultivators, Corn Harrows, Field and Garden Hoes, and as usual, a large assortment of IMPLEMENTS AND SEEDS, comprising nearly every variety used by the planter.

ROBERT SINCLAIR, Jr. & Co.

Light street near Pratt street wharf.

june 4 2t

DAHLIA ROOTS.

The subscriber can furnish any quantity of DAHLIA ROOTS to the number of one thousand, recommended to be a choice variety, all of the double kind, and from the well known nursery of Samuel Reevs, Esq'r. near Salem, New Jersey. I can also furnish from the same nursery very superior APPLE TREES for spring planting, if orders are given in soon for them. Peach Trees cannot be furnished from the said nursery before next fall.

J. S. EASTMAN.

CONTENTS OF THIS NUMBER.

Notice of an agricultural society in Prince George's co Md.—cotton crop of Alabama—raising of poultry—to destroy sorrel—request to agricultural friends—the crops—value of industry—the beaver—Columbian horticultural society—pruning fruit trees—preparing corn stubble for the plough—cutting timber, &c.—honors to husbandmen in China—geological survey of Maryland, continued—on manures—quality of milk during the process of milking prices current—advertisements.

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every Monday

	PER	FROM	TO
BEANS, white field,.....	bushel.	1 00	1 10
CATTLE, on the hoof,.....	100lbs	—	10 00
CORN, yellow.....	bushel	72	73
White.....	“	68	71
COTTON, Virginia.....	pound	9	11
North Carolina.....	“	10	11
Upland,.....	“	9½	11
Louisiana — Alabama.....	“	11	12
FEATHERS,.....	pound.	48	50
FLAXSEED,.....	bushel.	1 25	dull.
FLOUR & MEAL—Best wh. wh't fam.....	barrel.	10 00	10 50
Do. do. baker's.....	“	—	—
SuperHow. st. from stores.....	“	7 87	8 00
“ wagon price,.....	“	7 37	7 50
City Mills, super.....	“	7 75	—
“ extra.....	“	8 00	—
Susquehanna,.....	“	8 00	—
Rye,.....	“	4 62	—
Kiln-dried Meal, in hhds.....	hhd.	18 00	—
do. in bbls.....	bbl.	3 50	—
GRASS SEEDS, wholes. red Clover,.....	bushel.	—	11 00
Kentucky blue.....	“	2 50	3 00
Timothy (herds of the north).....	“	2 25	2 50
Orchard,.....	“	2 00	2 50
Tall meadow Oat,.....	“	—	3 00
Herds, or red top,.....	“	1 00	1 25
HAY, in bulk,.....	ton.	10 00	15 00
HEMP, country, dew rotted,.....	pound.	6	7
“ water rotted,.....	“	7	8
HOES, on the hoof,.....	100lb.	7 75	—
Slaughtered,.....	“	—	—
HOPS—first sort,.....	pound.	9	—
second,.....	“	7	—
refuse,.....	“	5	—
LIME,.....	bushel.	33	34
MUSTARD SEED, Domestic, —; blk.....	“	3 50	4 00
OATS,.....	“	32	33
PEAS, red eye,.....	bushel.	—	1 12
Black eye,.....	“	1 00	1 12
Lady,.....	“	—	—
PLASTER PARIS, in the stone, cargo,.....	ton.	3 75	—
Ground,.....	barrel.	1 50	—
PALMA CHRISTA BEAN,.....	bushel.	—	—
RAGS,.....	pound.	3	4
RYE,.....	bushel.	88	94
Susquehanna,.....	“	—	none
Tobacco, crop, common,.....	100lbs	3 00	3 50
“ brown and red,.....	“	4 00	6 00
“ fine red,.....	“	8 00	10 00
“ wrappery, suitable.....	“	—	—
“ for segars,.....	“	10 00	20 00
“ yellow and red,.....	“	8 00	10 00
“ good yellow,.....	“	8 00	12 00
“ fine yellow,.....	“	12 00	16 00
Seconds, as in quality,.....	“	—	—
“ ground leaf,.....	“	—	—
Virginia,.....	“	4 50	6 00
Rappahannock,.....	“	—	—
Kentucky,.....	“	5 00	8 00
WHEAT, white,.....	bushel.	1 85	—
Red, best.....	“	1 70	1 80
Maryland inferior.....	“	—	—
WHISKEY, 1st pf. in bbls.....	gallon.	34	35
“ in hhds.....	“	32	—
“ wagon price,.....	“	31	—
WAGON FREIGHTS, to Pittsburgh,.....	100 lbs	1 25	—
To Wheeling,.....	“	1 50	—
WOOL, Prime & Saxon Fleeces,.....	pound.	40 to 50	20 22
Full Merino,.....	“	35 40	18 20
Three fourths Merino,.....	“	30 35	18 20
One half do.....	“	25 30	18 20
Common & one fourth Meri.....	“	25 30	18 20
Pulled,.....	“	28 30	18 20

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,.....	barrel.	—	—
BACON, hams, new, Balt. cured.....	pound.	12½	13
Shoulders,.... do.....	“	11	—
Middlings,.... do.....	“	11	—
Assorted, country,.....	“	8½	9½
BUTTER, printed, in lbs. & half lbs.....	“	20	25
Roll,.....	“	—	—
CIDER,.....	barrel.	—	—
CALVES, three to six weeks old.....	each.	5 00	6 00
Cows, new milch,.....	“	30 00	40 00
Dry,.....	“	12 00	15 00
CORN MEAL, for family use,.....	100lbs.	1 62	—
CHOP RYE,.....	“	1 50	1 60
EGGS,.....	dozen.	12½	—
FISH, Shad, No. 1, Susquehanna,.....	barrel.	8 75	—
No. 2,.....	“	8 25	—
Herrings, salted, No. 1,.....	“	3 75	—
Mackerel, No. 1, ——— No. 2.....	“	10 00	12 00
No. 3,.....	“	—	—
Cod, salted,.....	cwt.	3 00	3 25
LARD,.....	pound.	9	10

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

	PER.	FROM.	TO.
U. S. Bank,.....	par	—	—
Branch at Baltimore,.....	do	—	—
Other Branches,.....	do	—	—
MARYLAND.			
Banks in Baltimore,.....	par	—	—
Hagerstown,.....	3a	—	—
Frederick,.....	do	—	—
Westminster,.....	do	—	—
Farmers' Bank of Mary'd, do	do	—	—
Do. payable at Easton,.....	do	—	—
Salisbury,.... 1 per ct. dis.	do	—	—
Cumberland,.....	par	—	—
Millington,.....	do	—	—
DISTRICT.			
Washington,.....	do	—	—
Georgetown,.....	do	—	—
Alexandria,.....	do	—	—
PENNSYLVANIA.			
Philadelphia,.....	par	—	—
Chambersburg,.....	3	—	—
Gettysburg,.....	do	—	—
Pittsburg,.....	2½	—	—
York,.....	½	—	—
Other Pennsylvania Bks,.....	2	—	—
Delaware [under \$5].....	4	—	—
Do. [over 5].....	14	—	—
Michigan Banks,.....	10	—	—
Canadian do.....	10	—	—
VIRGINIA.			
Farmers Bank of Virgi,.....	12	—	—
Bank of Virginia,.....	do	—	—
Branch at Fredericksburg, do	do	—	—
Petersburg,.....	do	—	—
Norfolk,.....	do	—	—
Winchester,.....	do	—	—
Lynchburg,.....	do	—	—
Danville,.....	do	—	—
Bank of Valley, Winch. par	par	—	—
Branch at Romney,.....	1	—	—
Do. Charlestown, par	par	—	—
Do. Leesburg,.....	do	—	—
Wheeling Banks,.....	32a4	—	—
Ohio Banks, generally.....	5aC	—	—
New Jersey Bankgen,.....	3	—	—
New York City,.....	par	—	—
New York State,.....	do	—	—
Massachusetts,.....	14a2	—	—
Connecticut,.....	14a2	—	—
New Hampshire,.....	14a2	—	—
Maine,.....	14a2	—	—
Rhode Island,.....	14a2	—	—
North Carolina,.....	5	—	—
South Carolina,.....	6a7	—	—
Georgia,.....	8a10	—	—
New Orleans,.....	8a10	—	—

TO THE PUBLIC.

Try the New Agricultural Establishment in Grant-street, next door to Dinsmore and Kyle.

Every article warranted to be first rate. The subscribers, grateful for past favors, take this early opportunity of returning their thanks to their customers and the public in general, and beg leave to inform them that they are now provided with a very extensive stock of newly manufactured AGRICULTURAL IMPLEMENTS, suitable to meet the call of Farmers, Gardeners, Merchants, Captains of vessels, and others, viz: 1000 Ploughs, assorted sizes, from \$4 to \$15 each, comprising of the old common Bar Shear, Winand's Self Sharpening; Woods & Freeborn's patent, all sizes, "Davis," "Sinclair & Moore's" improved Hill Side Ploughs, highly esteemed for turning the furrow down hill, with wrought or cast shears; Wheat Fans, of various sizes and patterns, from \$15 to \$50 each, warranted to separate the chaff from the wheat; Corn Shellers, from \$12 to \$20; Cutting Boxes, from \$7 to \$50 each; Corn and Tobacco Cultivators, large and small; Expanding do.; Wheat Cradles, warranted to have "fingers" of the natural growth, and Grass Scythes, &c. &c.; Castings, of all descriptions and patterns, by the lb. or ton, to suit customers, allowing a liberal discount to merchants buying to sell again—finals which will be furnished on the most pleasing terms and every article warranted to be of the best quality, in

proportion to the cost price. All orders by mail or otherwise shall be duly attended to with the greatest despatch.

We would particularly call the attention of Country Merchants and others, wishing to purchase agricultural implements to sell again, to the fact, that we will furnish them with articles on better terms than they can be supplied at any other establishment in the city. Our assortment is complete and as varied as that of the most extensive concern in Baltimore.

We have also connected in its operations with the above branch of business a complete assortment of FIELD AND GARDEN SEEDS, kept by Thomas Denny—Also Garden and Farm Tools, of various sorts and of the choicest collection, which will enable our customers to have filled entire all orders in the Agricultural and Seed Departments. mh 26 JOHN T. DURING & Co.

SUPERB DOUBLE DAHLIAS.

ALSO, GARDEN AND FLOWER SEEDS.

The subscriber offers for sale at his establishment the best collection of Double DAHLIAS offered to the public, and will warrant every root true to name and colour, but they are too well known to need any comment in their favor, as most all amateurs in the vicinity have seen them in bloom to their great satisfaction, so those who wish to have roots that are genuine, apply at the right place, and lower than any other in the city as to quality.

Besides he offers a general and good collection of Garden and Flower SEEDS, fresh imported, that cannot be raised to perfection in this country; he has selected from Europe, and will dispose of them on reasonable terms, with a general collection of Greenhouse, Herbaceous and hardy plants, also Bulbous Roots. Catalogues can be had at his establishment, corner of Pine and Lexington street, Baltimore, by

JOHN FEAST,

Florist & Seedsman.

ap 24 3t

FARMERS' REPOSITORY.

OF AGRICULTURAL IMPLEMENTS AND EASTMAN'S CYLINDRICAL STRAW CUTTERS IMPROVED.

THE Subscriber informs the public that he has secured by letters patent his late and very important improvements on his Cylindrical Straw Cutter, by which improvements they are made more durable and easier kept in order. All the machinery being secured to an iron frame the shrinkage, wear and decay of wood is avoided. The feeding part of his improved machine is upon an entire different principle from the former machine; far more durable, requiring neither skill or care to keep it in order. These machines are so constructed as to make the freight on them less than half what it cost to ship the former or wood machines, an important desideratum to purchasers living at a distance; and I now offer it to the public upon the credit of my establishment as the most perfect machine in existence for the same purpose. They are also adapted to cutting rags for paper making, and for cutting tobacco as manufactured by Tobaccoists, &c.

I also keep these machines on hand made as heretofore with my new feeding machinery attached to them; and also a general assortment of Agricultural Implements, as usual. Elliott's Horizontal Wheat Fans, and Fox & Bolland's Threshing Machines are both superior articles.

My stock of Ploughs on hand are not equalled in this city either for quality, quantity, or variety. I have a large assortment of Plough Castings at retail or by the ton, and having an Iron Foundry attached to my establishment can furnish any kind of Plough or Machine Castings on reasonable terms and at a short notice.

All repairs done with punctuality and neatness. On hand, a few Patent Lime Spreaders, Horse Powers, &c. &c. Also just received, a fresh supply of Landreth's superior Garden Seeds. In store, superior Timothy and Orchard Grass Seed and Seed Oats. All implements in the agricultural line will be furnished by the subscriber, as good and on as reasonable terms as can be had in this city, with a liberal deduction to wholesale purchasers. Likewise will receive orders for Fruit Trees from Mr. S. Reeves' Nursery, New Jersey.

JONATHAN S. EASTMAN,

Pratt street, Baltimore,

feb 20

Between Charles & Hanover sts

A NEW-FOUNDLAND SLUT.

For sale, a large size New-Foundland Slut, of large size and very handsome. Her color is black. She is thoroughly broken to the gun, and in pup to a bull dog; price \$20. Enquire of the editor of the Farmer and Gardener, Baltimore, Md.

MORUS MULTICAULIS TREES.

The subscriber has from 25,000, to 30,000 Morus Multicaulis trees now growing at his residence, with roots of 1, 2, and 3 years old, which will be ready for sale this fall, and which he will sell on moderate terms

EDWARD P. ROBERTS.

THE FARMER & GARDENER

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, E. P. ROBERTS AND SAMUEL SANDS—EDITED BY E. P. ROBERTS.

No. 8.

BALTIMORE, MD. JUNE 19, 1838.

Vol. V.

THIS publication is the successor of the late
AMERICAN FARMER.

and is published at the office, at the N. W. corner of
Baltimore and North streets, over the Patriot office, at two
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month from the time of subscribing, or \$3 if after that
time. All letters to be post paid.

BALTIMORE: TUESDAY, JUNE 19, 1838.

IMPROVEMENT OF A POOR FIELD.

A correspondent who signs himself "A Young
Farmer," says:

"I have on my estate an old worn out field
that has been turned out for about seven years,
because it would not repay the expense of culti-
vation. I desire to reclaim it with a view of put-
ting it in clover; but owing to the scantiness of
my supply of barn yard and stable manure, am
not able to spare enough to give it heart, without
robbing my other and more profitable fields. I
have lime within $2\frac{1}{2}$ miles of me, which I could
procure in the stone at a moderate cost; have
plenty of wood. Now would it be worth the ex-
pense and trouble to lime such a field as I have
described? If so, what would be the cheapest
process to follow?"

In reply to our correspondent we have to ob-
serve, that we have no hesitation in saying, that
we do believe his "old field" would be worth the
"trouble and expense" of improvement; and,
that, notwithstanding his scanty supply of "farm
yard and stable manure," he has another resource
which will prove effective in bringing about its
melioration. There is no doubt that buckwheat
will grow on it, and, therefore, we advise him to
plough his old field up forthwith, and sow it in
that grain at the rate of 3 or 4 pecks to the acre.
As soon as the buckwheat is in blossom, roll it,
plough it in, and top dress the field at the rate of
50 bushels of lime to the acre. Let the lime re-
main undisturbed through the winter, and as soon
as the frost is out of the ground in the spring,
sow the field in oats, which should be harrowed
in deeply; then sow 12 lbs. of clover seed to the
acre, or indeed 16 lbs. would not be too much;
brush harrow that in; let the field remain two
years in clover, roll down and plough in the sec-
ond year, and he may, we have no doubt, put his
field down in wheat, or any thing else, with a cer-
tainty of reaping a good crop. The oats when
fairly up should be plastered.

By following the above plan, our correspond-
ent will perceive, he will only lose the crop of

buckwheat, which will certainly be less loss to
him than the cost of stable or barn-yard manure
would be, and as to the expense of lime, that
should not be taken into the account, as from its
permanent character its cost will bear subdivis-
ion for many years.

Indeed, it is our honest opinion, that the im-
provement of worn-out lands should only be at-
tempted where lime, ashes, or marl, forms the main
ingredient relied on; for all other agents of meli-
oration, are of so temporary a character in their
effects, as not to be worth the "trouble and ex-
pense."

THE CROPS.

It is a source of unmixed pleasure—of unfeign-
ed gratitude to God—to be able to state so near
the usual harvest time, that the prospects for good
crops of wheat, rye and oats, have not been so
encouraging for many years, and though our in-
formation for the two great staples of cotton and
tobacco is not so general, we are led to hope that
they will prove equally productive, as the infor-
mation we have, go to encourage that belief.

With abundant crops, and ordinary wisdom in
those appointed to rule us, there is nothing to im-
pede the march of our Republic to greatness, or
to prevent us from being the happiest, as we cer-
tainly are the freest, people on earth. But without
public virtue, those advantages arising from a
fruitful soil, auspicious climate, and free institu-
tions, may be despoiled of a large portion of
those blessings, which such elements are so well
calculated to confer.

BERKSHIRE PIGS.

We had consigned to us a few days since, by
Col. C. N. Bement, of Tree Hill Farm, near Al-
bany, six fine pigs of the above breed, for Major
Abraham Barnes, of Stafford Hall, Washington
County, Md. and we feel it due to their present
liberal and enlightened owner to say, that his
neighbors will be greatly indebted to him for in-
troducing so excellent a breed of Hogs into their
vicinity, as they cannot fail to do much towards
improving their stock. The Berkshires are re-
markable for their easy keep, early maturity and
great weight. Under proper treatment, (which
the present lot will not fail to receive under the

auspices of their new proprietor,) they attain the
weight of from 250 to 300 lbs. at 1 year old, and
many of them at two and three years of age,
weigh from 500 to 600 lbs. The Berkshires are
a thrifty race, mostly black, black and white, and
black and sandy; the present lot are of the former
colors; short legged, round or barrel bodied, with
great length of sides, and possess the happy fac-
ulty of keeping fat on comparatively moderate
feeding.

That such a breed of swine is eminently cal-
culated to improve the common stock of our
country, no one who may have ever seen them,
will for a moment doubt, nor will any one ac-
quainted with Major Barnes, or with his generous
and kind disposition, doubt but that in all time to
come, the traces of improvement in the hogs of
Washington county will be visible, as we are cer-
tain that the promptings of that laudable ambi-
tion, which induces him to expend a portion of
his ample means, in the procurement of valuable
stock, will make it a source of inexpressible
pleasure to him, to be instrumental in promoting
an object of so much paramount interest as is the
improvement of the breed of the hogs of his
county. To do good—to enhance the value of
a country's resources—to add to its comforts—is,
as it should be, among the truest sources of hap-
piness to an enlightened and patriotic mind, and
believing the present noble effort of Major Barnes
to be of that character, our fondest aspirations
shall be, that the six Berkshires we have been an
humble instrument in forwarding him, may prove
one of those peaceful trophies, which imparts so
just a cause of pride to a farmer's heart.

PERRENIAL RYE GRASS.

Last spring I procured a small quantity of the
Perennial Rye Grass, and sowed it in my gar-
den. My object was to ascertain whether it was
adapted to our climate; and how far from the
smallness of the experiment, it might prove an ac-
quisition in our rural management. The grass
made but an indifferent appearance, until the rains
commenced in the fall; after which it put forth
rapidly, and has exhibited a most luxuriant growth
ever since. Even at this time, though the ther-
mometer has been as low as ten degrees, and the
season quite cold, the blades are perfectly green,
not showing the slightest appearance of having
been nipped by the frost. It is decidedly the

most beautiful grass I have ever seen, except perhaps the English grass or greensward, which it closely resembles in the length and glossiness of its spears. The bunches are large and the blades very long. Encouraged by the flattering result of this trial, I have purchased a few bushels for the sowing a lot; and I think I may confidently recommend to others to do the same. There can be no doubt of its being well adapted to the soil and climate of New York, judging from the hardness with which it resists the cold. The quantity of herbage afforded by the Rye grass, appears so far to exceed considerably that of orchard grass, timothy, or fall oat grass, all of which, particularly the last, I have cultivated to some extent.

T. S. P.

Beaverdam, Va. 1st mo. 1st.

VINEYARDS AND WINE IN FRANCE.

We collect the following particulars respecting the importance of the grape to France, from Dr. Bowring's Report on the Commercial intercourse between England and France. The vineyards of France cover an extent of 6,600 square miles; and the statistical society of Paris estimate the quantity of wine produced at 908 millions 932,000 gallons, worth at an average about 12 cents a gallon. This wine is disposed of as follows:—

Consumed by the proprietors,	198,000,000 gals.
Distilled for brandy,	141,680,000 "
Loss and waste,	91,544,000 "
Losses in hands of dealers,	44,000,000 "
Exported,	24,580,000 "
Used for Vinegar,	11,000,000 "
Duty rec'd. on consumption is,	308,000,000 "
Fraudulent consumption,	105,466,000 "

If we allow the population of France to be 40 millions, and deduct the quantity distilled and exported, it leaves about 20 gallons to be consumed annually by each individual; a result which seems hardly reconcilable with the boasted temperance of the French people; though it shows plainly the great importance of the manufacture to the nation.

[From the Genesee Farmer.]

SOWING RUTA BAGA.

This is frequently done too late. It should be performed as early in the sixth month (June) as practicable. The roots always continue growing till cold weather, consequently early sowing is followed by larger crops. A light soil is best, but any will do which is not wet, and is deep, mellow, and rich. It can scarcely be manured too highly.

There are three ways of sowing. Where a turnip drill is not at hand, the easiest way is to sow broadcast, but the crop is not quite so great as when sown properly in drills, the plants not being so evenly distributed. The second way is to plant them in drills about 15 or 18 inches asunder, with the plants about 10 inches in the drill. It is best to sow them much more thickly, and subsequently thin them, to prevent the loss occasioned by vacant spaces. The cleaning in this method, is done wholly with the hoe. Twice the number of roots to the acre are thus produced, that are obtained by the method of placing the drills at twice the distance to admit a cultivator, though

their proximity doubtless lessens in some degree their size.

The third method is to plough the land into deep furrows about two and a half or three feet apart, fill them with manure and throw the soil with a plough back upon it, and thus form manured ridges for planting the drills upon. This method is peculiarly adapted to heavy soils, or to those which suffer from wetness. Those farmers who have none but clayey land, should try it effectually.

The quantity of seed required is about one pound to the acre. They require much thinning—those unused to the cultivation of them usually permit five times too many to remain on the ground.

Those only doubt their value, who have witnessed none other than the injudicious use of them.

Ordinary crops, properly managed, are not less than 500 or 600 bushels to the acre—favorable seasons 800—1000 are frequently obtained, and in rare instances at the rate of 2000 to the acre.

J. J. T.

[From the Wheeling (Va.) Gazette.]

BLIGHT IN PEAR TREES.

A clever writer in the Genesee Farmer truly observes, that "this disease has had as many causes assigned for it as there are theories for the formation of the globe, and some of them about as preposterous; and, like Macbeth's witches, 'come, like shadows, to depart.'" Nevertheless, I will venture to offer another, and one, which, I hope, will settle the question.

My opinion is, that blight takes place only in such trees as have imperfect tap roots, or none at all. In this part of the country it is the common practice, and, I presume, it prevails elsewhere—to propagate pear and quince trees from sprouts; and hence, these are more afflicted with the disease than apple trees. The remedy, then, is to plant the trees when quite small—plant only seedlings or such as have been grafted on seedling stocks; or, what would be still better, plant seeds at proper orchard distance—this will prevent the necessity of transplanting, which always, more or less, injures the tap root. When the trees are the proper size, graft them. I intend to plant an orchard of pear trees in this way, and when they arrive at "a good old age," free from blight, my theory will be believed, if not before.

That I have assigned the true cause of the disease, and pointed out the only effectual remedy, I entertain scarce the shadow of a doubt. I am surprised that it did not occur to me until a few days ago, or that the discovery has not been made by others long since.

The tap root is of more importance than is generally supposed. If a fruit tree, after coming to mature age, does not blossom, which frequently happens, owing to a redundancy of nourishment, bore a hole in the tap root, and it will thenceforth be fruitful; but, in all probability, you shorten its life by the operation. I mention this fact as a proof that the tap root affords a large portion of the sap of the tree. And now let it be observed, that when a tree is affected with the blight, the sap stops short in its ascent, not owing to any defect in the cellular system, but because the roots

are unable to send it the full distance: and in the name of Pomona, is this to be wondered at, when the primary root is missing or defective?

Philosophers have not yet agreed as to the cause of the ascension of sap. Is it not probable that they are all wrong, and that, contrary to all their opinions, it is forced up by some unknown power? How else could sap rise 43 feet in a tube attached to the end of a cut vine? This experiment has been tried, and I believe is pretty well attested. If, then, the sap is forced up, may not the propelling power be greater at the tap than at the lateral roots, and always adequate to send it to the uttermost extremities, which is all that is necessary to preserve the tree from blight? But what is the use of theories, when we have facts? It is well known, that the tap root penetrates deep into the earth; that it is always plentifully supplied with moisture; that the quantity of sap it supplies is uniform, neither increased by rain, nor diminished by drought; and on it must the tree chiefly depend for a regular supply of nourishment, adequate to the support of every branch.

To test the truth of what I have said, let those interested in the matter examine the roots of their blighted trees. This may easily be done, for many of them must be dug up, as they "cumber the ground;" and if one can be found with a perfect tap root, I will yield my theory; but if, on the other hand, all blighted trees are found defective in the primary root, I will contend that it is established.

An important question arises, how are we to preserve the defective trees we now have, until we can get better ones? I answer, protect the secondary roots in such a way, that they may be able in some measure, to perform the functions of the primary one. This can best be done by putting plenty of litter around the trees to a considerable distance, or as far as the roots extend, such as chips, &c.; any thing that will absorb a portion of the rain, and prevent evaporation from the earth in dry weather.

R. I. CURTIS.

Grave Creek, May 9, 1838.

THE ROHAN POTATOE, A NEW VARIETY.

The following is an extract from a letter written from Geneva, of date 25th April, 1837, by Prince Charles de Rohan to M. Jacquemont Bonnefont, nurseryman, Annoney, in the Ardeche:

"I send you, through my friend M. Romilly, a root to which my name has been given in this country. The history of this potatoe is not less singular than the potatoe itself. He who obtained it from seed four years ago shews it, but will not give it to any person; he has refused it to King William. He has cultivated it in a little walled inclosure; he only wishes to see it in perfection, and the seed of the following year. He makes them to be taken up in his presence; keeps them under lock and key, and to be cooked for himself and cattle before his face. It is at great risk that I have been able to procure two tubers. This exclusive amateur having learnt that I had got some cactuses, which he wished much to have, begged me to give him some. I wished no money, but very much to have some of his wonderful potatoe. He gave me two of them, and made me give my word of honor that I would never send any of them to Holland, Belgium, England, Prussia, or

Germany. Happly he has not thought of Switzerland nor France: for, without this omission I could not have the pleasure of offering these to you.

"This is the mode of cultivating these potatoes: The earth is dug to the depth of twenty inches—make the distance between the holes four feet, and put two or three eyes, or sets, in each, earth up frequently. The stalks, reaching six or seven feet in height, must be supported on transverse stakes. The kind being late, the tubers, which are very farinaceous, should only be taken up about Martinmas, when the stalks wither.

"To give you an idea of the extraordinary produce of this potatoe, I give three examples at random. M. E. Martial, at Alis, gathered last autumn, tubers weighing 13 lb. 7 oz. and 11 lbs. 9 oz., and 9 lbs. 13 oz. M. de Montet, a proprietor near me, asked me for tubers, when I could not give him more than a single small tuber having four eyes. He weighed it for curiosity, and found that it wanted a few grains to make half an ounce. However, this small tuber being planted, produced 38½ lbs. The attorney of the Abbey of Auterive, Canton of Fribourg, to whom I had given two tubers two years ago, and who, delighted with his first harvest, after having eaten and given some to his friends, planted the rest, and obtained last autumn six double horse loads, and eight scuttle-full. It is not the largest tubers which succeed best as seed.—*Le Cultivateur, Jour. des Progress des Agricoles.*

AGRICULTURE.

To solicit his mother earth for life's sustenance by the wholesome process of tillage, has ever been the most natural and honorable occupation of man. The great Creator has designated the earth, not only as the common receptacle of the mouldering bones and decayed forms of human kind, but also as their common source of aliment and support whilst the vital current continues to flow. And as the pursuits of agriculture is the most universal and natural employment of our race, so it is the most rich in moral fruits; and more than any other avocation, leads to a desirable innocence and simplicity of life. Its rural scenery, "the pomp of groves, the garniture of fields, all that the genial ray of morning gilds, all that echoes to the song of even, and all the dread magnificence of heaven," are so many sublime incentives to adoration and gratitude.

The season of the year has now arrived when the busy operations of husbandry are going on:

When first young zephyr melts the mountain snow,
And spring unbinds the mellowing mould below;
Press the deep plough, and urge the groaning team,
Where the worn shares, in opening furrows gleam."

It is now the patient earth endures the rake and the harrow, and in return for the deep wounds inflicted on her broad and furrowed visage, promises an ample remuneration in those precious fruits that constitute the life of man and beast. It is now that the hand of industry deposits among the clods the dry and withered seeds, which would remain as unproductive as the salt sown by Ulysses on the sea-shore, but for the kindly blessing of Heaven.

The true secret of Agriculture, as Cato has long since taught us, is to "feed well." The neglect of this rule will be fatal to all success in the mat-

ter, will bring disappointments instead of harvests, and poverty instead of abundance. It will be found universally, that husbandry may be pronounced good or bad according to the observance or disregard of this rule. Let the faithful beasts of burden be consigned to leanness, let the lowing herds pine away for want of sufficient pasture, let all the creatures for man's use be left in meagre, ill-fed forms, and no great penetration will be requisite to portray the character of such husbandry. But reverse the picture, and the most captious and fastidious taste would admit the merit of the management that could so bless and beautify the beasts of the field.—*Northampton Farmer.*

BONES—MANURE.

It is well known that bones converted to dust constitute the most efficient and valuable manure that has yet been discovered; and that to this substance much of the improved state of European agriculture may fairly be attributed. It has occurred to us as somewhat surprising that in the present advanced state of chemical science, and when the constituent parts of bones are so well known, that no attempts to produce a compound embracing the same substances and capable of producing the same results, have yet been made. Bones are composed of gelatine, fat, cartilage, and earthy salt. Chemistry has determined the nature of each of these substances, and the proportions in which they generally exist in bones is also known. The earthy salts are lime and phosphorus, or the solid part of the bone is phosphate of lime; a substance of great value to plants, and which is found in many of them. We therefore can see no insuperable obstacle in the production of an article, which if it could be afforded at a reasonable cost, would, from its active nature, and the ease with which it can be applied, supersede all others in those places and for those purposes in which ordinary manure is inefficient or disgusting. We regret that the profound genius of the philosophic Davy had not been directed to this point; as such a discovery would be one of the greatest gifts science has yet made to agriculture. Perhaps, however, the discovery has been reserved for Hare or Silliman, as the application of electro-magnetism to mechanical purposes was for Davenport. We shall see.—*Gen. Farmer.*

ALLEGANY MARBLE—The Cumberland Civilian of Saturday says—We were yesterday shown a specimen of Marble, by Mr. WILLIAM HERD, assistant superintendent of masonry on the Chesapeake and Ohio Canal, taken from the quarry of Messrs. G. G. JOHNSON & Co. on Evatt's Creek, on the land of the late Col. Lamar. This specimen is of a brown colour, is very smoothly polished, and handsomely variegated with light coloured crystalization. The bed of this production of marble is said to be inexhaustible, and is susceptible of being worked to great advantage. From the neat appearance, and smooth polish of this specimen, we should judge this marble to be of a superior quality; and we cannot doubt, that its discovery will prove of vast benefit and profit, as the completion of our great works of improvement shall afford an outlet for its transportation to market.

TREATMENT OF WOUNDS ON HORSES.

Having seen a communication, extracted from the Maine Farmer, requesting information in regard to the treatment of wounds on horses, and having had some experience of the value of the following remedy, I confidently recommend its use. It is a solution of saltpetre and blue stone. The saltpetre should be first dissolved in warm water, in such proportions as to be moderately strong to the taste, and blue stone added, until the solution is slightly tinged. This, and nothing else, is to be used as a wash, two or three times a day. It purifies the wound, destroys proud flesh, produces granulations immediately, and heals the worst wounds in a surprisingly short time. I have had horses badly kicked and otherwise hurt, in mid-winter and in mid-summer; their cure was equally rapid, and afterwards no scar was visible. The wound requires no covering—flies will not approach it, and dressing it with a small mop of rags, tied to a stick, is very little trouble. Wounds do not require to be sewed up under this treatment; at least I never saw any advantage from it, as the stitches uniformly have torn out.—The skin will approximate as the wound heals.—*PENN.—Correspondent of the Farmer's Cabinet.*

Heat this.—Mr. L. Decker, an adjoining townsman, writes that he has a calf, a cross of the Durham and Devonshire, only eight days old, which weighs 125 lbs. This is no doubt an extraordinary calf; but can Mr. Decker make it weigh 195 lbs. at the end of five weeks—the weight of an extra calf which sold in our market a few mornings since?—*Goshen Republican.*

RUSSIAN CLOVER.

A variety of clover seed bearing this name was brought into our market, last year, by Mr. A. F. Palmer, and a few pounds were sold and sown. It grew up rapidly, and blossomed, with a somewhat long and conical head. Some sown by friend Paine Wingate went to seed. It appears to be a thrifty variety, and will undoubtedly yield a good burden per acre. How it will stand the winter, is a question which we cannot now answer. We hope it will receive a more extensive trial another year. It will undoubtedly prove a fine crop for many purposes besides for hay, such as an excellent pasturage for bees, as well as neat cattle, &c.—*Maine Farm.*

A good Cow—From the 27th of December last to the 27th of March, 12 weeks and 6 days, Mr. Aaron Colton, of Conway, sold 133 lbs. of butter made from one cow, besides what was consumed in his family, consisting of himself and wife—They judge this was from 15 to 20 lbs. Taking the least quantity, it makes a fraction over 11½ lbs. per week—The cow was kept solely on hay and a few top stalks, without meal, potatoes, or any other feed whatever, during the whole time, except three pumpkins. During the best of the season, the milk of four days made 8 lbs. 3 oz. of butter. Of the 133 lbs. 70 sold for 20 cents per lb. and the remainder for a shilling.—*Hampshire Gaz.*

In dry weather, water all plants which suffer from drought, always doing it in the evening.

[From the Village Record.]

MARKS OF GOOD CATTLE.

Mr. Snyder—As there is a disposition manifested by many persons to improve their stock of cattle, I have thought that a few observations upon the subject might be acceptable to some of your readers. In Indiana, the two principal objects in breeding cattle appear to be beef and milk. And as certain forms are found to possess particular qualities, I shall proceed to describe what are the proper forms, and what the desirable qualities generally connected with these forms; and in doing this, I shall avail myself of the experience and observations of others.

The head ought to be small and the muzzle fine, the countenance calm, the horns fine; the neck light, particularly where it joins the head; the breast wide, and projecting well before the legs; the shoulders moderately broad at top, and the points well in, so as to leave no hollows behind them when the animal is moderately fat; the girth behind the shoulders should be deep, so that if the carcass was cut across here, it would be an oval, blunt at both ends; the back straight, wide and flat; the ribs broad, and the space between them and the hips small; the flank full and heavy; the belly well kept in and not sinking much in the middle, the ribs globular, wide across, and on a level with the back; the twist should be wide, and the seam in the middle of it well filled; the thigh should be straight, tapering well down to the hock; the legs straight, short-jointed, clean, fine bowed, and standing wide apart; the tail broad towards the top, tapering down, and the smaller towards the bottom the better; the body long, and jointed well to the quarters before and behind; not barrel-shaped, for this does not allow sufficient depth, but a section of the body should be an oval blunt at both ends. Where the body is barrel shaped, there will be a deficiency both before and behind where it joins the quarters.

I shall now proceed to state the particular advantages of the above described form. The reason why the head should be small and the muzzle fine, is that it facilitates birth: and as the head is composed mostly of bone, it shows fineness of bone, the advantages of which are that the animal possessing them will fatten upon half the food that coarse, big-boned, long jointed ones will require. Calmness of countenance, also, indicates a disposition to get fat, the restless and vicious never fatten kindly. The lightness of the neck is advantageous to the butcher, who will get less coarse meat in such. The wideness of the breast and deep girth, give greater room for the lungs. A straight back shows strength, a weak animal being generally sway or hump-backed. Poor keeping will produce those deficiencies in a calf that was at first well formed. The straight back also denotes an aptitude to fatten kindly. Much depends upon the room the lungs have; no animal can be good whose lungs occupy a small space, and as the lungs occupy all the space within the ribs, so it is of great importance that the space inside of them should be large, for this reason, the ribs should be spread wide, and extend well back towards the hips. The full heavy flank in the cow, is a most certain indication of a good milker, and the bull thus formed, generally pro-

duces cows that milk well. The belly being nearly straight shows strength in the flates. Globular ribs hold much flesh, and it is much easier put on such than upon those that are sharp. Wide ribs give a broader loin and more capacity to the pelvis. From the hips to the rump long and straight with the back, the hind quarter that is thus formed will weigh very heavy, the wideness of the twist, and filling up of the seam, gives the greater weight to the upper part of the thigh—Straight legs are stronger than crooked ones—Clean legs and small tail show fine bones. Short joints in the legs is also an excellent mark of an animal fattening easily, for every animal requires food to fatten it in proportion to the length of the leg. A short-legged animal with a large body will fatten upon less food than a long-legged one with a small body. When the brisket and twist are large, the legs will be wide apart, and it is important that both these be large.

I have said above that the head should be small; but I did not mean that a bull's head should look like any thing but a bull's head, for if it looks like a steer's or cow's, he will be uncertain in propagating his species. If the neck should be disproportionately long and slender, it denotes a weakly constitution. The body cannot well be too long whilst the legs keep wide apart, as a long body throws much weight in the carcass; but in very long bodies there is a tendency in the legs to get too close together, leaving the breast thin and reducing the twist. This I would consider a serious misfortune.

In breeding it is of importance that where there is a deficiency in one, the other should be particularly good in that part, and the best should always be selected for breeders; rejecting every thing that is common. By always selecting the best and breeding from them alone, any stock may be very much improved, so that in a few generations they will hardly look like they had sprung from such a stock.

I have frequently heard it asked what makes such cattle as I have described worth more than others equally large. There are many reasons; but I will confine myself to three. And first they come earlier to maturity, thus saving in those that are intended for beef two or three years' keeping. They carry more fat and flesh upon the most valuable parts. It is known to persons who are in the habit of buying beef of a butcher, that he makes a difference of four or five cents in a pound of meat taken from different parts of the same animal. Now it must be plain to every one, that those animals which carry their principal weight in those parts that command the highest price, must be worth the most, and of course he will give more for them. They fatten upon half the food that others require; of course they are worth more to the man who fattens them.

WM. TICHENOR.

[From the Genesee Farmer.]

THE OAT.

The oat, *Avena sativa* of the naturalist, is a grain very useful, and better adapted to the northern climate than any other plant that has been used for bread. It is chiefly confined to the more moist and cool portions of the American and European continents, being scarcely known in the

south of France, Italy or Spain; or in the southern parts of the United States, or in tropical countries. Of all the cultivated grains, oats are the easiest of culture, and the most certain and prolific in its product. The varieties of oats are very numerous, and some of them are very distinctly marked, and as in the case of wheat, there seems no reason why new varieties may not be produced at pleasure.

Mr. Loudon, in his Encyclopedia, enumerates the principal varieties cultivated in Scotland and England as follows; and from his work we have copied the figures of two of these varieties, illustrating as much perhaps as any, the most marked peculiarities of this valuable plant.

The white or *Common oat*, is in most general cultivation, and known by its white husk and kernel.

The *Black Oat* known by its black husk, cultivated in England and Scotland on poor soils.

The *Red Oat*, known by its brownish red husk, thinner and more flexible stem, and firmly attached grains. It is early, suffers little from winds, and makes good meal, and suits exposed situations, and late climates.

The *Poland oat*, known by its thick white husk, awnless chaff, solitary grains, short white kernel, and short stiff straw. It requires a dry warm soil, and is very prolific. The black Poland oat is one of the best varieties, and sometimes weighs 50lbs. per bushel.

The *Dutch oat* has plump, thin skinned, white grains, most double, and the large one sometimes awned. It has longer straw than the Poland, but in other respects resembles it.

The *Potatoe oat*, has large plump, rather thin skinned white grain, double and treble, and with longer straw than either of the last varieties. It is preferred to all others in England, for land in good cultivation, and bears a higher price in the London market than any other.

The *Georgian oat*, is a large grain, remarkably prolific variety introduced from Georgia, near the Caspian sea. Some cultivators, on good land, prefer it to the potatoe oat.

The *Siberian or Tartarian oat*, is considered by some as a distinct species. The grains are black or brown, thin and rather small, and turned mostly to one side of the panicle or ear. The straw is large and reedy, but it is usually very productive, and is well calculated for the poor soils, and exposed situations.

A variety called the *Winter oat*, is cultivated in some parts of England. It is sown in October, the plants are luxuriant at Christmas, tillering like wheat; is depastured by ewes and lambs all the spring; the fields are then shut up, and an ample harvest is cut in August.

There are many other varieties of oats known, their names owing to some local cause, and by selection, or systematic impregnation, new kinds may be originated at pleasure. Degeneracy in any variety usually takes place in a limited time, unless care is taken to select the best heads and well ripened grains for seed. Some English farmers are at the pains to select the best seeds after the grain is threshed. The best seeds are picked out by hand by women.

It is found by experience, that of the numerous cultivated varieties, the Potatoe and Poland are the best selections for low land, and the red oat

for good uplands; the common or the black oat, may be sown on inferior soils; as may also the Tartarian. The numerous instances given in the last volume of the Farmer, of the astonishing productiveness of the Tartarian, shows that it is a variety well adapted to our soils and climate.

In the sowing of oats less regard may be had to soil than with any other grain; the only requisite seems to be that it shall not be too wet. Tenacious clays, or poor gravel, where scarcely any seed bearing plant will grow, will produce a crop of oats, if ploughed at the proper season, and the seed of good quality and judiciously put in—"The best oats both in quantity and quality, are those which succeed grass; indeed no kind of grain seems better qualified by nature for foraging upon grass lands than oats; as a full crop is usually obtained in the first instance, and the land left in good order for succeeding ones." (*British Husbandry*.)

In England the time of sowing oats is from February to April; a proof of the great disparity existing between the climate of this country and that; since here, oats are sown from the last of April until June; very few being usually put in during the month of April. It should always be remembered, however, that early sown oats, as well as spring wheat and barley, are always heavier and of better quality, than late sown ones, and as a general rule, all spring grains should be put into the ground as early as the soil can be prepared for their reception.

As with other grain, the quantity sown per acre varies much with different agriculturists and in different countries. Here, from two and a half to three bushels an acre, is considered amply sufficient; "in England from four to six bushels are usually sown." (*Loudon*.) Potatoe oats require a less quantity than other oats, as they tiller better than other varieties, and having no awns, contain a greater number of grains in a bushel.

AGRICULTURAL IMPLEMENTS.

To Patentees and Manufacturers of Agricultural Implements.

If you will turn your attention to the investigation of the present condition of Wisconsin, and the northern parts of Illinois, you will learn that a vast portion of their land being prairies, and openings, present facilities for the profitable use of your valuable implements of husbandry, equal to the long cultivated fields of the oldest states, and that the country is rapidly filling up with settlers, whose enterprising spirit is a sufficient prompter to induce them to profit by every improvement which will greatly advance their agricultural interests, provided such improvements become known to them, and measures taken to place the improved implements alluded to, within their reach. Therefore being convinced that you will forward them for sale to the farming community of this territory, you will not only promote your own pecuniary interest, but you will also confer a benefit of no mean order on the community, by augmenting the number of those, who possess the means of relieving agricultural labor of half its toils. The implements to which I more particularly allude, and of the advantages of which I am more especially acquainted, are the following:

1. Bement's Expanding Cultivator or Horse Hoe. With the aid of this useful instrument the

culture of Corn, Potatoes, Beans, Turnips, Beets, &c. is rendered easy and expeditious.

2. The Drill Barrow. Well adapted to sow all seeds that are to be sowed in rows, as beans, ruta baga, beets, &c. With the Cultivator and the Drill Barrow, the beet may be raised as easy as corn or potatoes.

3. Cnklin's Press Roller. This is used upon green sward, recently ploughed, and not only levels and smoothes the surface, but perforates the sods full of small holes, which admit rain, air and heat, by which the decomposition of the sods are accelerated.

4. Hatch's Sowing Machine. It can be gauged to sow any particular number of bushels to the acre. More especially adapted to sowing ashes, lime or plaster.

5. Revolving Hay Rake or the Columbian Hay Rake. With this labor saving machine, one man with a boy and horse, can rake with ease 6 or 7 acres per day on a smooth meadow, and do the work well. By it also the mowing of peas on smooth ground may be dispensed with. With a horse rake you can gather them in windrows, with less than a quarter of time and expense requisite to mow them.

6. Straw Cutter. A straw cutter of a construction well adapted to speedy cutting of straw and hay, is an article that no farmer will remain long deprived of, who is apprised of the vast advantages of manger feeding.

To these we might add were it not for prolonging this article too much, some remarks in relation to the usefulness of Maxwell's patent self-feeding corn-sheller—Craig's Angled Harrow—Hale's Horse Power—a cheap instrument which may be applied to the propulsion of various machines on a farm, to wit: a grind-stone, corn-sheller, threshing machine, &c. &c.

If these or any other inventions which give rational promise of aiding the farmer in the prosecution of his important occupation should be sent into the territory, it would afford us pleasure to present to the farming community a full statement of their usefulness, and also give them a pictorial representation, provided the owner will be at the expense of the cut for the purpose.—*Wisconsin Cultivist*.

From the Genesee Farmer.

HOOF-AIL.

Mr. Tucker—Inasmuch as there are different opinions in relation to the true cause of hoof-ail in cattle, perhaps it may not be amiss to lay before the readers of the Farmer some facts which go strongly to show that it is caused by the ergot of spear grass. On the 24th of March, T. Hale, of Scipio, Cayuga Co., purchased a stack of hay containing a considerable quantity of spear grass, which is loaded with ergot, as the sample I send you enclosed will plainly show. He separated two cows from the rest of his stock, and drove them one mile distant to another barn. It may be proper to mention, that his cattle were all in good order at this time, and no indication of disease among them; and further, that those left at the barn where they were kept during the winter, are now in good spring condition. The two cows mentioned above, were fed on the hay he purchased, and in eight or nine days after he commenced feeding them, they were affected in the

hind feet with lameness and all the symptoms of the hoof-ail. About this time, Mr. Hale's hired man drove his cow to the barn and foddered her with the same hay. In eight or nine days, she was affected in the same manner. Every remedy recommended in the Farmer was applied, but to no effect. One of the cows was equally affected in the fore feet and legs. Her hoofs came off and her legs were completely dead below the knee and gambrel joints. The fore legs were so badly cracked at the knee joints, that a slight wrest would have separated them from the remainder of the limbs. This one has been killed. The other two will undoubtedly follow the same fate, as their hoofs are off, and their legs will eventually crack off some three or four inches above the pastern joints. Mr. Hale thinks the hay affects his horses, as they grow poor, though he feeds them more grain than he has usually, to keep them in good order.

Perhaps it may not be out of place to mention an incident which happened a few days since in relation to the poisonous effects of ergot. A lock of this hay was thrown into a pen where a rabbit was confined, and in a day or two the rabbit died. Whether it was the ergot that caused its death or not, I will leave undetermined.

JOHN B. BOWEN.

Ledyard, May 21, 1838.

NEW REAPING MACHINE.

We have to congratulate our agricultural readers upon the invention of a new reaping machine, likely, from its simplicity and efficacy, to form an important era in the rural labors of the farm.—This machine is totally different from those highly ingenious implements invented by Mr. Bell and Mr. Smith, of Deanston; and, in operation, may be said to combine the clipping with the cutting principle. The cutters are attached to a revolving cylindrical drum, from which they are exerted on the inner side, together with the rake for carrying round the cut corn, from whence they move round towards the exterior of the standing corn; when, after having performed the work allotted to them in each revolution, they are again withdrawn to the inside of the cylinder, for the purpose of facilitating the laying down of the grain in a regular manner, and in being sharpened by a streak appended for that purpose. It also possesses the advantage, never hitherto obtained, of being equally applicable to standing as well as lying corn, and can be worked on the most irregular surface, in consequence of a regulating wheel preceding the cutter. It is calculated to cut ten acres a day with the assistance of a man and horse.—*Correspondence of the Scotsman*.

The Highest Price!—On Friday last, Dr. Jas. T. Stevens, of this place, sold three hhds. of Tobacco, made at his Farm, on Beaver Creek, in this county, at the following living prices: No. 1, at \$20 $\frac{1}{2}$; No. 2, at \$18 $\frac{3}{4}$; and No. 3, at \$8 70; average, upwards of \$16! The two first hhds., which are described by connoisseurs (we do not masticate the weed) as remarkably sweet and pleasant to the taste, were purchased by Seth Halsey, Esq. for manufacturing.—Lynchburg Virginia.

GEOLOGICAL SURVEY OF MARYLAND.

By PROFESSOR DUCATEL.

(CONTINUED.)

SEC. III.—Physical Geography and Geology of Montgomery county.

The limits of this county comprise an extent little above 556 square miles, containing 356,326 acres, more than one half of which is waste lands, and nearly the whole of this capable of being converted into soils of superior quality, at a comparatively trifling expense.

The soils of the whole county are bedded upon primary rocks, with the exception of that portion lying between the Seneka and the Monocacy, on the S. E. slope of Parr's ridge, and contiguous to the Potomac, where the subjacent rocks are red shales and sandstones of the *transition* class. They are all produced by the decomposition of the rocks, in place, excepting, of course, in the alluvial bottoms of the rivers; so that their mineral constituents can generally be determined by a knowledge of the characters of the strata which they overlie. Hence, also, great varieties in the nature and qualities of these soils, which are as numerous as the rocks from which they were produced. From this condition of things, it follows that the *geology* of the county requires to be first described.

The Patuxent, which forms the N. E. boundary of the county, takes its rise among the *Argillites* of Parr's Ridge, traversing in a South East direction the whole mass of primary rocks. A section made in the direction of its course exhibits the *talcose slates*, traversed by large veins of quartz, succeeding to the *argillites*, and passing into *talcose slates*, and the latter into *steatite*. At Bond's Mill, a short distance below Snell's bridge, the rocks on the Montgomery side of the river are *talcose slates*, with bands of granular quartz; and on the opposite side, well characterised *steatites* and *soapstones* make their appearance. The river does not leave the primary rocks until it has flown some distance through Prince George's county.

On the other hand, a section of the course of the Potomac, within the limits of the county, of which it forms the S. W. boundary, presents, at the mouth of the Little Monocacy, and extending a short distance below that of the Seneka, rocks usually referred by geologists to the *transition* series. These are principally red and gray *sandstones*, that are extensively quarried near the mouth of Seneka, below which they instantly pass into *shales*, and finally into *talcose slates*, to be succeeded by *hornblende micaslate gneiss*, and the usual *granitic* aggregates. At the Great Falls, the rock is a compact mixture of quartz and mica, traversed by veins of quartz, and, where the mica abounds, has a slaty structure. The lines of stratification are very indistinct, and the dip of the rock most generally to the N. W. Between this and the Little Falls, the *micaslate*, *gneiss*, *sienite*, and *granites* present their accustomed alternations and passages into each other, and so continue to the mouth of Rock Creek, in the District.

The rocks just enumerated are the prevailing ones of the county, and occur together variously associated; so that transverse sections made through the beds of the Seneka and Rock Creek, would nominally present the recurrence of the same kinds of rocks. But, as our object now is

to consider them solely in their economical relations, it is not necessary to dwell on the geological peculiarities they exhibit, any farther than will serve to group them in a way to illustrate more satisfactorily the agricultural and mineral resources of the county. The county may thus be divided into four principal regions, namely, the basin of the Patuxent, including the valley of Hawling's river; the basin of Rock creek; that of the Seneka; and the Sugar-lands, so called. Under these heads, I shall now proceed to give an account of the physical geography and agricultural condition of the county.

1st. *Basin of the Patuxent, including the valley of Hawling's River.*—This portion of the county comprises a long belt of inferior hills, or spurs, between the river and an elevated ridge, upon which, starting from Damascus, Cracklingtown, Mechanicsville and Sandy Spring are located. Its length is about twenty-three miles, and its greatest breadth, measured from Cracklingtown, through Unity, to Triadelphia, is six miles. In its upper part, the rocks, as already stated, are *argillites* and *talcose slates*, passing into *steatites* and *serpentine*; and as these last are magnesian rocks, the soil which they produce is meagre, and in many places quite arid. Yet the talcose slate, although it contains a large proportion of magnesia, produces by its decomposition a light red soil, which yields very well in oats and corn; and when it passes into a slaty *hornblende*, it is always found to give rise to a good wheat soil. The rocks just named are the predominant ones that make their appearance along the banks of the Patuxent, in Montgomery county, the trough of which, in many places, affords extensive alluvial flats, covered by a rich vegetable mould, very productive, and convertible into fine meadows. In the lower and central portions of the region now under examination, and especially in the valley of Hawling's river, the predominant rocks are *hornblende*, compact and slaty, *gneiss*, *micaslate*, *sienites*, and various *granitic* aggregates, yielding as many different kinds of soil, which, though possessed of little depth, are well constituted, and all of them highly improvable by the usual tillage, which has a tendency to deepen, as well as to comminute and mix their several constituents. They take plaster kindly, and by the application of one hundred to one hundred and fifty bushels of lime to the acre, may be made equal to the best lands of the State. Already, indeed, has the use of lime by several of the most intelligent and enterprising farmers of these parts, made the valley of Hawling's River and the vicinity of Brookville the productive and flourishing portions of the county. Along the whole course of Hawling's River, a distance of twelve miles, and its tributary branches, as well as in the valley of Reedy branch, which also empties into the Patuxent, there are valuable meadow grounds. This region possesses also some fine tracts of woodland, consisting of white and black oaks, yellow poplar, (*Liriodendron Tulipifera*), hickory; some chesnut and gum. The chesnut occurs more especially on the ridges, whilst the bottoms are covered by large poplars and sycamore. The curled maple (*Acer Striatum*) is not uncommon in shaded forests growing upon the rocky soil in the vicinity of Unity. Finally, in reviewing the agricultural advantages of the county, it is not un-

important to state that it is abundantly watered by numerous and constant streams, affording a good supply of water power, and the wells, that are commonly sunk to the depth of from thirty to fifty feet, yield, almost every where, water of great purity; thereby contributing largely to the comfort and health of the inhabitants.

2d. *Basin of Rock Creek, &c.* This division will be made to embrace not only that portion watered by Rock creek and its tributaries, but another to the N. E. about the head waters of the N. W. Branch of the Potomac, and one to the S. W., having drainage through Cabin John's and Watts' branches. The prevailing rock in this division is the *talcose slate* traversed by veins of quartz, frequently containing *schorl*, from which the numerous detached fragments of this mineral, observed scattered over the surface of the country in all directions, have doubtless proceeded. In some cases the veins are very large and consist of a pure white quartz, which having more effectually resisted the disintegrations and decompositions brought about by time in the strata which they traverse, form more rugged and more elevated ridges composed of large disrupted masses that have been mistaken for boulders; but as they show no marks of being water worn, and as a more careful examination proves them to be intimately connected with the surrounding formation, the explanation just given of their occurrence and appearance is probably the correct one. From these ridges generally proceed the smaller masses previously alluded to as strewn the surface of the ground. But although the talcose slate is the predominant rock in this region, it frequently passes into *hornblende slate*, and sometimes into *steatites*, whilst very usually the beds of the streams expose to view the *gneiss*, *micaslate*, *sienite* and compact *hornblende*. It is a subject perhaps worthy of remark in the geology of Maryland, that a transverse section made through the primary rocks of the State exhibits the more highly crystalline aggregates, at the Eastern extremity, occupying a lower position in reference to tide than the slate rocks contiguous to the transition series.

The region under examination consists in a succession of subordinate hills between the more elevated ridges, characterised by rounded summits, supporting an original, or as some writers have termed, a *local* soil, varying, as has now been frequently repeated, according to the nature of the subjacent strata. The talcose and hornblende slates yield red soils of an ochery character, having considerable body, easily improved by plaster and clover, and requiring nothing but lime to render them very productive. These form what were formerly considered among the best lands of the county, and have been exhausted by repeated and alternating crops of tobacco and corn, without any rest or any return of vegetable nutriment. Hence, a large proportion of this part of the county presents a succession of waste fields, calculated to impress the observer with the idea that they are irreclaimably barren, were it not that some few, and yet but feeble efforts at improvement, have been crowned with complete success, tobacco, corn, rye, oats, potatoes, and even wheat, being found, by a little good management, to yield profitable returns. These efforts will be more particularly noticed in a subsequent part of this report.

Concluding the account of the physical geography of this division, it may be stated, that it embraces some fine tracts of woodland, consisting of oaks, hickory, and dogwood, with sycamore, poplar, and walnuts in the richer bottoms. It is, as the other portions of the county are, well watered, the valleys of the several streams within it affording valuable meadow lands; and almost every where there can be obtained an abundance of pure and wholesome water.

3d. Basin of the Seneka.—The Seneka takes its rise in the Fork of Parr's ridge, and besides numerous smaller tributaries, receives on its Eastern side three more important branches, the Whetstones, Long Draught, and Dawes' branch—and on the western side, the Little Seneka, and the Dry Seneka, which are all fed by copious and constant springs; so that this region likewise is discovered to be well watered, for agricultural as well as manufacturing and economical purposes. It is in this portion, too, that the principal resources of the county has hitherto been discovered, occurring within quite a considerable tract of land, in which *serpentine* in the prevailing rock. The tract referred to appears to be confined to the Eastern side of the Seneka, and extends from the dividing ridge between the head waters of Seneka and those of the Patuxent, in a southern direction nearly down to the Potomac. It embraces two minor ridges known in the county as the oak ridge, covered by black jack, and the Pines. The mineral contained within it is usually designated as the *chrome ore*, the nature and value of which will be more particularly indicated under the head of the mineral resources of the county. Wherever the serpentine rocks occur the soil is found to be poor, supporting a stunted growth of oak and pines, and seldom adapted to any profitable cultivation; it is fortunate, therefore, that there should be found beneath it something to give value to the region.

On the west of the Seneka, between it and the Little Seneka, the rocks are principally talcose slate, alternately green and red, crossed by large veins of quartz of a compact character and fracturing into lozenges. Between the Little Seneka and the branch called Buck-lodge, the quartz is more porous, the pores lined by earthy black oxide of manganese, and occasionally enclosing specular oxide of iron. In this direction the talcose slate varies in colour from red to greyish and blue, assuming a more decidedly slaty character, and finally passes into *argillite*. About the region of the Dry Seneka, and towards the mouth of Seneka, the rocks are red and grey sandstones and shales; whilst near the mouth of Monocacy and between it and the Little Monocacy the sandstone varies in colour from grey to red, and in character from a well defined fine grained sandstone to what may be termed a *puddingstone* with a base of *sandstone*, enveloping pebbles of quartz and nodules of slate. The red sandstone is here traversed in the northwardly direction, by a large dyke of *trap*, forming a distinct subordinate ridge, that again presents itself in the direction of Darnstown from the mouth of Monocacy, and on ascending Parr's ridge the talcose slate traversed by veins of quartz reappears.

The agricultural condition of the portion embraced within what has been designated as the Basin of the Seneka, is much the same as already

described to belong to the eastern division of the county. That is, in the midst of a very large proportion of waste and unimproved lands, there may still be found some farms that by good management give evidence of the entire practicability of completely restoring nearly the whole. The region is well watered, elevated, in some places commanding a distant and magnificent prospect of the Virginia chain of mountains as well as of the Blue ridge in Maryland, and is unexceptionably healthy.

4th. The Sugar Lands.—The tract of country which has received this appellation is that lying near the margin of the Potomac, between the mouths of Seneka and the Monocacy. The name is derived from the circumstance that it was formerly covered by the sugar maple (*Acer saccharinum*.) Its soil is produced by the decompositions of red and grey sandstone intermixed with red shale; and this is the character of a much larger portion of the county, that more particularly and usually designated as the sugar lands. The red and grey sandstones intermixed with shale occupy at the S. W. extremity of the county an area of about twenty square miles, supporting a soil originally of the very best kind, and in their present condition most readily improved by lime. Some of the most valuable estates of the county are located in this region, which presents all the usual agricultural advantages; and by its proximity to the Chesapeake and Ohio Canal additional facilities for the transportation of its produce, as well as for obtaining any of the mineral manures that may be required for its further improvement. Tobacco, corn, oats, rye and wheat are the chief crops that are relied upon.

THE AMERICAN FARMER.

The proprietors of this paper have a few complete sets of this work on hand, which they will dispose of at the reduced price of \$50 a set.—They are half bound and comprise each 15 volumes. The American Farmer, it will be recollected, was the *pioneer* in agricultural improvement in this country, being established in 1819 by John S. Skinner, Esq., to whose talents and industry its pages are indebted for, perhaps, the most valuable collection of agricultural matter to be found in any work extant. Those who desire to possess themselves of this valuable work will make early application as the number for sale is very limited.

SUPERB DOUBLE DAHLIAS.

ALSO, GARDEN AND FLOWER SEEDS.

The subscriber offers for sale at his establishment the best collection of Double *DAHLIAS* offered to the public, and will warrant every root true to name and colour, but they are too well known to need any comment in their favor, as most all amateurs in the vicinity have seen them in bloom to their great satisfaction, so those who wish to have roots that are genuine, apply at the right place, and lower than any other in the city as to quality. Besides he offers a general and good collection of *Garden and Flower SEEDS*, fresh imported, that cannot be raised to perfection in this country; he has selected from Europe, and will dispose of them on reasonable terms, with a general collection of Greenhouse, Herbaceous and hardy plants, also Bulbous Roots. Catalogues can be had at his establishment, corner of Pine and Lexington street, Baltimore, by

JOHN FEAST,
Florist & Seedsman.

ap 24 3t

TO THE PUBLIC.

Try the New Agricultural Establishment in Grant-street, next door to Dinsmore and Kyle.

Every article warranted to be first rate. The subscribers, grateful for past favors, take this early opportunity of returning their thanks to their customers and the public in general and beg leave to inform them that they are now provided with a very extensive stock of newly manufactured AGRICULTURAL IMPLEMENTS, suitable to meet the call of Farmers, Gardeners, Merchants, Captains of vessels, and others, viz: 1000 Ploughs, assorted sizes, from \$4 to \$15 each, comprising of the old common Bar Shear, Winand's Self Sharpener; Woods & Freeborn's patent, all sizes, "Davis," "Sinclair & Moore's" improved Hill Side Ploughs, highly esteemed for turning the furrow down hill, with wrought or cast shears; Wheat Fans, of various sizes and patterns, from \$15 to \$50 each, warranted to separate the garlic from the wheat; Corn Shellers, from \$12 to \$20; Cutting Boxes, from \$7 to \$50 each; Corn and Tobacco Cultivators, large and small; Expanding do., Wheat Cradles, warranted to have fingers of the natural growth, and Grass Seythes, &c. &c.; Castings, of all descriptions and patterns, by the lb. or ton, to suit customers, allowing a liberal discount to merchants buying to sell again—*final* which will be furnished on the most pleasing terms and every article warranted to be of the best quality, in proportion to the cost price. All orders by mail or otherwise shall be duly attended to with the greatest despatch.

—We would particularly call the attention of *Country Merchants* and others, wishing to purchase agricultural implements to sell again, to the fact, that we will furnish them with articles on better terms than they can be supplied at any other establishment in the city. Our assortment is complete and as varied as that of the most extensive concern in Baltimore.

We have also connected in its operations with the above branch of business a complete assortment of FIELD AND GARDEN SEEDS, kept by Thomas Denny—Also Garden and Farm Tools, of various sorts and of the choicest collection, which will enable our customers to have filled *entire* all orders in the Agricultural and Seed Departments. mh 26 JOHN T. DURDING & Co.

FARMERS' REPOSITORY OF AGRICULTURAL IMPLEMENTS AND EAST- MAN'S CYLINDRICAL STRAW CUTTERS IMPROVED.

THE Subscriber informs the public that he has secured by letters patent his late and very important improvements on his Cylindrical Straw Cutter, by which improvements they are made more durable and easier kept in order. All the machinery being secured to an iron frame the shrinkage, wear and decay of wood is avoided. The feeding part of his improved machine is upon an entire different principle from the former machine; far more durable, requiring neither skill or care to keep it in order. These machines are so constructed as to make the freight on them less than half what it cost to ship the former or wood machines, an important desideratum to purchasers living at a distance; and I now offer it to the public upon the credit of my establishment as the most perfect machine in existence for the same purpose. They are also adapted to cutting rags for paper making, and for cutting tobacco as manufactured by Tobaccoists, &c.

I also keep these machines on hand made as heretofore with my new feeding machinery attached to them; and also a general assortment of Agricultural Implements, as usual. Elliott's Horizontal Wheat Fans, and Fox & Bolland's Threshing Machines are both superior articles.

My stock of Ploughs on hand are not equalled in this city either for quality, quantity, or variety. I have a large assortment of Plough Castings at retail or by the ton, and having an Iron Foundry attached to my establishment can furnish any kind of Plough or machine Castings on reasonable terms and at a short notice.

All repairs done with punctuality and neatness. On hand, a few Patent Lime Spreaders, Horse Powers, &c. &c.

Also just received, a fresh supply of Landreth's superior Garden Seeds. In store, superior Timothy and Orchard Grass Seed and Seed Oats. All implements in the agricultural line will be furnished by the subscriber, as good and on as reasonable terms as can be had in this city, with a liberal deduction to wholesale purchasers. Likewise will receive orders for Fruit Trees from Mr. S. Reeves' Nursery, New Jersey.

JONATHAN S. EASTMAN,
Pratt street, Baltimore,
Between Charles & Hanover sts

feb 20

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every Monday

	PER	FROM	TO
BEANS, white field,	bushel.	1 00	1 10
CATTLE, on the hoof,	100lbs	8 75	9 50
CORN, yellow	bushel	72	73
White	"	69	70
COTTON, Virginia,	pound	9	11
North Carolina,	"	10	11
Upland,	"	9 1/2	11
Louisiana—Alabama	"	11	12
FEATHERS,	pound.	48	50
FLAXSEED,	bushel.	1 12	
FLOUR MEAL—Best wh. wh't fam.	barrel.	10 00	
Do. do. baker's	"		
SuperHow. st. from stores	"	7 87	8 00
" wagon price,	"	7 37	7 50
City Mills, super.	"	7 75	8 00
" extra	"	8 00	
Susquehanna,	"	8 00	
Rye,	"	4 50	4 75
Kiln-dried Meal, in hhds.	hhd.	18 00	
do. in bbls.	bbl.	3 50	
GRASS SEEDS, wholes. red Clover,	bushel.		11 00
Kentucky blue	"	2 50	3 00
Timothy (herds of the north)	"	2 25	2 50
Orchard,	"	2 00	2 50
Tall meadow Oat,	"		3 00
Herds, or red top,	"	1 00	1 25
HAY, in bulk,	ton.	10 00	15 00
HEMP, country, dew rotted,	pound.	6	7
" water rotted,	"	7	
HOGS, on the hoof,	100lb.	7 75	8 00
Slaughtered,	"		
HOPS—first sort,	pound.	9	
second,	"	7	
refuse,	"	5	
LIME,	bushel.	33	34
MUSTARD SEED, Domestic, —; blk.	"	3 50	4 00
OATS,	"	33	34
PEAS, red eye,	bushel.		1 12
Black eye,	"	1 00	1 12
Lady,	"		
PLASTER PARIS, in the stone, cargo,	ton.	3 62	
Ground,	barrel.	1 50	
PALMA CHRISTA BEAN,	bushel.		
RAGS,	pound.	3	4
RYE,	bushel.	85	87
Susquehanna,	"		none
TOBACCO, crop, common,	100lbs	3 50	4 00
" brown and red,	"	4 00	6 00
" fine red,	"	8 00	10 00
" wrappry, suitable	"		
" for segars,	"	10 00	20 00
" yellow and red,	"	8 00	10 00
" good yellow,	"	8 00	12 00
" fine yellow,	"	12 00	15 00
Seconds, as in quality,	"		
" ground leaf,	"		
Virginia,	"	4 50	6 00
Rappahannock,	"		
Kentucky,	"	5 00	8 00
WHEAT, white,	bushel.	1 85	
Red, best	"	1 70	1 75
Maryland inferior	"		
WHISKY, 1st pf. in bbls.	gallon.	34	35
" in hhds.	"	32	
" wagon price,	"		
WAGON FREIGHTS, to Pittsburgh,	100lbs	1 25	
To Wheeling,	"	1 50	
WOOL, Prime & Saxon Fleeces,	pound.	40 to 50	20 22
Full Merino,	"	35	40 18 20
Three fourths Merino,	"	30	35 18 20
One half do.	"	25	30 18 20
Common & one fourth Meri.	"	25	30 18 20
Pulled,	"	28	30 18 20

MORUS MULTICAULIS TREES.

The subscriber has from 25,000, to 30,000 Morus Multicaulis trees now growing at his residence, with roots of 1, 2, and 3 years old, which will be ready for sale this all, and which he will sell on moderate terms
EDWARD P. ROBERTS.

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,	barrel.		
BACON, hams, new, Balt. cured,	pound.	12 1/2	13
Shoulders,	"	11	
Middlings,	"	11	
Assorted, country,	"	9 1/2	10
BUTTER, printed, in lbs. & half lbs.	"	20	25
Roll,	"		
CIDER,	barrel.		
CALVES, three to six weeks old,	each.	5 00	6 00
Cows, new milch,	"	25 00	40 00
Dry,	"	12 00	15 00
CORN MEAL, for family use,	100lbs.	1 62	
CHOP RYE,	"	1 50	1 60
EGGS,	dozen.	12 1/2	
FISH, Shad, No. 1, Susquehanna,	barrel.	9 75	10 00
No. 2,	"	9 50	
Herrings, salted, No. 1,	"	4 12	
Mackerel, No. 1, ———— No. 2	"		
No. 3,	"		
Cod, salted,	cwt.	3 00	3 25
LARD,	pound.	10	11

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

		VIRGINIA.
U. S. Bank,	par	
Branch at Baltimore,	do	Farmers Bank of Virgi. 1 1/2
Other Branches,	do	Bank of Virginia,
		Branch at Fredericksburg,
MARYLAND.		Petersburg,
Banks in Baltimore,	par	Norfolk,
Hagerstown,	do	Winchester,
Frederick,	do	Lynchburg,
Westminster,	do	Danville,
Farmers' Bank of Mary'd, do	do	Bank of Vall'y, Winch, par
Do. payable at Easton,	do	Branch at Romney,
Salisbury,	1 per ct. dis.	Do. Charlestown, par
Cumberland,	par	Do. Leesburg, ... 1 1/2
Millington,	do	Wheeling Banks, ... 3 1/2 a 4
DISTRICT.		Ohio Banks, generally 5a6
Washington, } Banks, 1/2 p.c.		New Jersey Banks gen. 3
Georgetown, }		New York City, ... par
Alexandria, }		New York State, ... d
PENNSYLVANIA.		Massachusetts, ... 1 1/2 a 2
Philadelphia,	par	Connecticut, ... 1 1/2 a 2
Chambersburg,	1/2	New Hampshire, ... 1 1/2 a 2
Gettysburg,	do	Maine, ... 1 1/2 a 2
Pittsburg,	2 1/2	Rhode Island, ... 1 1/2 a 2
York,	3	North Carolina, ... 5
Other Pennsylvania Bks. 2		South Carolina, ... 6a7
Delaware [under \$5]	4	Georgia, ... 8a10
Do [over 5]	1 1/2	New Orleans, ... 8a10
Michigan Banks,	10	
Canadian do.	10	

FOR SALE,

Two superior DEVON bulls, 4 years old this spring, of the purest blood in the country, fine form and remarkably large. Any gentleman wishing to procure one will find it to his advantage to embrace the present opportunity, as they will be sold at the low price of \$100 each, deliverable in Baltimore.

Applications in writing, post paid, to be made to the subscriber.

EDWD. P. ROBERTS, Baltimore, Md.

may 29

3t

NEW BALTIMORE SEED STORE.

THE Subscriber having located himself in Grant street, near Pratt, three doors in the rear of Dinsmore & Kyle's Grocery Store, takes this early method of informing his friends and the public, that he has commenced the GARDEN AND FIELD SEED BUSINESS, and solicits a portion of public patronage. He has on hand and intends keeping, at all times, a constant and general assortment of the very best FIELD AND GARDEN SEEDS, a part of the latter, being of the last year's importation, and all the growth of 1837.

Also GARDEN AND FARMING TOOLS, of various kinds; a few barrels of ITALIAN Spring WHEAT; RADEN CORN, raised, and carefully selected by Col. Mercer—DUTTON; MANDAN; SIOUX; AND EARLY SUGAR CORN; CLOVER; TIMOTHY, ORCHARD, & HERD'S GRASS SEEDS; BUCKWHEAT;

OATS; MILLET, WHITE DUTCH CLOVER; LUCERNE; TREFOIL; SAINFOIN, ENGLISH RYE GRASS, &c. &c.

Farmers, Gardeners, Merchants, Captains of Vessels, and others, are invited to give him a call, as they can be supplied not only with Field and Garden Seeds of all kinds, but also with PLOUGHS; HARROWS; STRAW CUTTERS; CORN SHELLERS; WHEAT FANS, WHEAT CRADLES, &c. &c., together with all other kinds of useful implements of Husbandry, manufactured and kept constantly for sale by John T. Durdin & Co. at their Agricultural Store, also in Grant street. Orders for articles in the above line by mail or otherwise, shall be faithfully and punctually executed.

THOMAS DENNY,

Grant street, 3 doors in the rear of Dinsmore & Kyle's

WATKINS' PATENT WHEAT FANS, HARVEST TOOLS, &c.

THE subscribers, being confident of the superiority of the Watkins' Fan have made arrangements with the Patentee to manufacture the article in this city.

The difficulty of procuring these fans from Washington county in this State (where they were formerly manufactured) and the high price at which they were sold has much retarded their introduction in our immediate vicinity; they are now manufactured by us at a reduction of about 40 per cent. on original price, and made of warranted materials and by experienced workmen. The Riddles and Screen of this fan are operated upon by a simple crank motion, and the general construction of the fan is such as to give the wind a proper direction and great force on the riddles, thus enabling farmers to clean double the quantity of grain and put it in better order for market than can be done by those in common use. Our assortment of Fans and Harvest Tools are as follows, viz:

Watkins' Patent Fans	\$30.00
do do with unshipping heads	32 00
Common Crank Shake Patent Fans,	25.00
do do with unship heads	27.00
do Dutch Fans,	20.00
Box Fans; a very complete fan and well suited for small farms,	16.00
Grain Cradles with 4 a 8 fingers and warranted	
Scythes attached,	4.00
do do with wire braces,	5.00
Grass Scythes and Sneaths, in complete order for mowing	2.25
Grain, Grass and Bramble Scythes,	
Sickles and Grass Hooks,	
Scythes Stones, assorted kinds, Ropes for whetting	
Grain Scythes,	
Horse and Hand Hay Rakes,	
Cradlers' Hammers,	
Hay Forks, of sizes suitable for making and pitching hay,	
Threshing Machines, &c.	

ALSO,

Corn and Tobacco Cultivators, Corn Harrows, Field and Garden Hoes, and as usual, a large assortment of IMPLEMENTS AND SEEDS, comprising nearly every variety used by the planter.

ROBERT SINCLAIR, Jr. & Co.

Light street near Pratt street wharf.

june 4

2t

DAHLIA ROOTS.

The subscriber can furnish any quantity of DAHLIA ROOTS to the number of one thousand, recommended to be a choice variety, all of the double kind, and from the well known nursery of Samuel Reeves, Esq'r. near Salem, New Jersey. I can also furnish from the same nursery very superior APPLE TREES for spring planting, if orders are given in soon for them. Peach Trees cannot be furnished from the said nursery before next fall.

J. S. EASTMAN.

CONTENTS OF THIS NUMBER.

Improvement of a poor field—the crops—Berkshire pigs—perennial rye grass—vineyards and wine in France—sowing ruta baga—blight in pear trees—the Rohan potatoe, a new variety—value of agriculture—bone manure—Alleghany marble—treatment of wounds in horses—large calf—Russian clover—valuable cow—hunt to water plants—marks good of cattle—varieties of the oat—agricultural implements—hoof-bail—new reaping machine—high prices for tobacco—geological survey of Maryland, continued—prices current—advertisements.

THE FARMER & GARDENER

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, E. P. ROBERTS AND SAMUEL SANDS—EDITED BY E. P. ROBERTS.

No. 9.

BALTIMORE, MD. JUNE 26, 1838.

Vol. V.

THIS publication is the successor of the late
AMERICAN FARMER,
and is published at the office, at the N. W. corner of
Baltimore and North streets, over the *Patriot* office, at two
dollars and fifty cents per annum, if paid within one
month from the time of subscribing, or \$3 if after that
time. All letters to be post paid.

BALTIMORE: TUESDAY, JUNE 26, 1838.

QUEEN ANNE'S COUNTY SILK COMPANY.

We are happy to learn, from a gentleman of Delaware, who derived his information from the best source, that this company have thus far been entirely successful. The Stockholders have already realized \$100 a share on their stock, the par value of which is but \$25 per share, and that it is now deemed to be worth \$125 per share.—Such a state of things is no less gratifying in a pecuniary point of view, than it is flattering to the sagacity of those who set the enterprise on foot. In all sincerity we wish the future progress of the members of this company, in their patriotic efforts to incite the citizens of our Eastern Peninsula to engage in the culture, may be crowned with still greater success; for, as pioneers in the holy work on that shore, they are entitled to the gratitude of every true hearted Marylander.

AMERICAN SILK HANDKERCHIEFS.

Feeling as we do a sincere interest in the success of the Silk Culture in America, we copy the subjoined article with feelings of pride and pleasure, as it demonstrates, not only the practicability of profitably manufacturing the raw material; but the existence of that generous spirit of enterprise which will ultimately lead our citizens into the adoption of the culture of silk as an important branch of husbandry. We have for several years made it the subject of our study, and after the maturest consideration which we have been able to give to it, we have no hesitation in declaring, that it is susceptible of being made the most profitable of all human employments.

Silk.—The West Chester Silk Company had a sale of handkerchiefs, manufactured from their own silk, on Tuesday last. There were 35 in number—and the aggregate proceeds were \$21.05. They were knocked off in quick time at from \$1.75 to \$3.00 a piece, to the supporters of domestic industry. Pretty well for Chester coun-

ty—there is none of the odor of monarchy about these articles. A man with an American handkerchief in his pocket, steps prouder and quicker. There is a magic in some things at least that are American.—*West Chester (Pa.) Village Record.*

BUILDING STONE FENCE.

To the Editor of the Farmer and Gardener:

Much error has prevailed in the manner of building stone fence, and error in this matter is attended with serious loss to the farmer, since there is no kind of fence, in ordinary use, so expensive, and if well built, so cheap in the end. A few observations upon this subject may not be amiss to those who are desirous of constructing this fence.

The first material error, but too common, has arisen from giving to the wall too wide a foundation, as much as 3 ft., 3½, and sometimes 4 feet, and then by drawing it in, or to use a mason's term, battering too much. Two evils spring from this mode of building; the fence is very apt to bulge, or split in two, and the facility for sheep or hogs to run over it, is as obvious as the fact itself is common. Again: fence built after this manner takes more stone than is really necessary, and however abundant the material may be, the mode of construction is radically wrong. The fence, which I have as yet built, about 200 yards is after this fashion: 2½ feet wide at bottom, and 1½ at top—height 4½ feet—a trench over 2½ ft. wide, and about 5 inches deep, is first made, and rarely more so, unless on ground liable to wash, as by a road side, ascending a hill, where a deep gully has been made: on stony ground, it may be dispensed with; but otherwise it is safe to dig a shallow foundation, as the action of the frost is thereby prevented, and which, I am very confident, has proved injurious in a high degree, when this precaution has been overlooked.

A fence of these dimensions, of good stone, and built by a skillful workman, I feel well assured, may endure for ages. But the laying of the stone aright is an object of the greatest importance; without especial care in this, serious mischief will follow. As a general rule then, indeed almost invariably, the stone ought to be placed crosswise and not lengthwise of the fence (a very common practice to give it a pretty facing) and altho' in comparison, but few will be found long enough to go through and thus serve as *binders*, yet many will pass more than half way, and so by over-laying alternately from side to side, the middle will be kept well bound, and the whole structure solid and compact. It is obvious to reason, as it has been often proved by experiment, that by laying stones lengthwise of the fence, and filling in the centre with small pieces, speedy dilapidation must take place. In short, with some modification, the rules, which govern in masonry, should be observed in the construction of this fence. Now

the only material variation, which I would suggest, is this: the masons (to adopt their terms) use *stretchers* chiefly and *headers* occasionally to bind the wall; but they use mortar, and that without stint, to consolidate the structure. As masons use stretchers to give a handsome facing, and mortar to impart strength, let the stone fence builder use headers altogether, or nearly, as he cannot be allowed any cement. Let me give an example. Take a stone 15 inches long and 4 wide, or 2 feet long and 6 inches wide, and put them across the fence, instead of lengthwise; is it not manifest, that they will be infinitely less liable to be displaced? I grant that stones may be placed lengthwise with great safety, provided especial care be taken to have the next course put on transversely; but it should be borne in mind, that it is not easy always to procure stone for this purpose of sufficiently good quality, for in this case, the stone should pass entirely through, whereas if all pass inwards or across, stone of an inferior quality will make a very substantial fence.

Thus you have the breadth at bottom and top, and the height and mode of building as practised by myself. Some of my fence has been built 3 years, and is as good in all respects as when first made. In passing, it is to the eye apparently perpendicular. No animal will attempt to leap over it. On top I place flat stones the width of the fence; this prevents the smaller stones from being knocked off. If stakes and rails were put on, they would serve nearly the same purpose; in which case, the height might not be quite so great, say 4 ft. 2 inches. The cost is greater than post and rail, but if *well built*, there is an end to future labor, expense and repairs.

June, 1838.

A VIRGINIA FARMER.

[For the Farmer and Gardener.]

GRAZING OF SHEEP IN CORN FIELDS.

BALTIMORE, June 21, 1838.

Mr. Roberts—A few days since while riding in the country with a friend, about 12 miles from this city, we observed a flock of sheep deliberately *feeding in a corn field*. Supposing they were trespassers, we lost no time in informing the proprietor of the circumstance; when to our surprise he laughed and said they would do no harm, that they were put in the field for the purpose of destroying the blue grass, &c., and farther, that sheep would never touch growing corn! Nothing but the sight of the experiment with my own eyes would have made me believe this statement; but having seen it, and observed also the manner in which, our information that the sheep were in his corn field, was received by him, I was obliged to yield my belief. You will readily see the importance, in various bearings, of this information to our farmers, without a special detail or reference.

Yours, &c.

GIDEON B. SMITH.

COLUMBIAN HORTICULTURAL SOCIETY.

The late Exhibition.—On Wednesday and Thursday last the public exhibition of this useful and valuable institution was held at Carusi's Saloon, agreeably to public announcement. The spacious and well-adapted apartment was arranged with great taste, and made a very handsome appearance; the numerous and beautiful flowers and plants imparting a delightful fragrance on every side. It was evident that the ladies had been busily employed, aiding the Committee of Arrangements, in producing that gratifying and imposing effect which struck every beholder who promenaded the saloon on the two days of the exhibition. The weather on Wednesday and Thursday last, being uncommonly hot and oppressive, the company in attendance during the day was not very numerous. In the evening, however, of both days, from sunset to ten o'clock, the Saloon was crowded with a very genteel, fashionable and enlightened company; amongst whom we noticed several foreign ministers, members of Congress, distinguished strangers, and clergymen. On the last evening, when about the close of the exhibition, an appropriate address was delivered by R. S. Coxe, Esq. the Saloon was unusually crowded. The Marine Band, as heretofore, was in attendance, and enlivened the company with their excellent music. Upon the whole, the Exhibition was well attended, and although, perhaps, the collection of flowers and plants was not equal to what has been witnessed on former occasions, it was a very gratifying and pleasing spectacle, which reflected much credit upon the Committee of Arrangements and their fair assistants.

We propose to notice the most striking specimens that were exhibited in the three departments of Flowers, Fruits and Vegetables; and, in doing so, we wish it may be understood, that it is probable many deserving articles may have escaped our attention, which will be hereafter noticed, according to their merit, in the official report, to be, in due time, laid before the public.—*Nat. Int.*

FLOWERS.

From Linnæa Hill, a collection of Geraniums in flower, Calceolarias, Roses, &c.

Mrs. Pierce exhibited some wreaths of the new Heartsease, raised by herself, the flowers very large, and of fine colors; some very good Pæonias, and specimens of some new Roses. Two fine Dahlias in full bloom, found many admirers.

Mr. Douglas exhibited a large collection of Geraniums, Roses, Calceolarias, Petunias, Cactuses, and a number of rare plants; among them, the *Nandina domestica*, in flower for the first time in this place.

Cactus Speciosissimus, the finest ever exhibited here, with four flowers expanded. It excited the admiration of every beholder; and was, from the beginning to the close of the exhibition, surrounded by a group of admirers. This collection also contained that curious and irritable flower the *Hydium*.

Mr. Buist exhibited a great number of beautiful Geraniums, Calceolarias, Roses, &c.; a choice collection of rare plants; among them, *Astrapea Wallichii*, several species of the beautiful tropical figs, such as *Ficus elastica*, *australis*, *nitida*, &c. fine New Holland Acacias. A beautiful specimen of *Acacia lophanta*, much admired for its minute feathering foliage.

By Col. Fowler, of Georgetown, a beautiful *Cactus Jenkinsonii*, full of splendid carmine-colored flowers. This and Mr. Douglass' *Cactus speciosissimus* were two of the most brilliant flowering plants in the room.

Mrs. M. Mason, Mrs. Thompson, and Mr. Geo. Thomas, exhibited fine large growing Carnations, Pinks in full bloom.

By Miss F. Clark, *Cactus speciosus*, with several of its delicate and pretty flowers expanded.

From Georgetown College, a number of rare plants; among them, a Cocoa-nut tree from Havana, a number of beautiful species of Fig marigold, (*mesimbryanthemum*) in flower, several Cactuses, Aloes, large Petunias, large *Nandina domestica*, coming into flower, scarlet Passion flower, several New Holland plants, and rare exotics.

Among cut flowers in vases, &c. Miss A. M. Gilman displayed her usual taste in sending a beautiful stand made of moss and native flowers, interspersed with Roses, Honeysuckles, &c. Mrs. Seaton, a large collection of Roses and garden flowers. The Misses Barnard, several vases of natives and exotics. Mrs. Douglas, some beautiful green-house flowers arranged in glass dishes. Mrs. Kurtz, of Georgetown, several large bouquets tastefully arranged. Mr. Wm. Douglas, a large quantity of Greville and multiflora Roses. And very valuable additions to the floral department were made by Mrs. W. A. Weaver, Mrs. J. F. Callan, Mrs. S. Burch, and several other ladies whose names are necessarily omitted in this brief notice.

Dr. Perrine exhibited some beautiful specimens of *foliaceous fibre*; that of the wild pine-apple, upwards of seven feet long, was almost as fine and soft as silk; the *Agave Sisalana* appears to be superior to common hemp. It is to be hoped that the day is not far distant when we shall see these plants, (agaves, aloes, and others, bearing fibrous leaves) extensively cultivated among us.

FRUITS.

The Society had great cause to congratulate themselves on the great improvement which was apparent in the specimens of fruits exhibited on the present occasion.

Large beautiful and noble specimens of strawberries were exhibited by Dr. Bayne of Prince George's county, Wm. Frazier, Wm. Cammack, Gen. Towson, Mrs. Foxall, and others.

The specimens of *Hautbois Strawberries*, exhibited by Mr. Ouseley, (gardener to the President of the United States,) very justly received the admiration of every visiter. His cherries and canteleupes were no less deserving of commendation.

Specimens of cherries were exhibited by Messrs. Watterston and Cammack, Gen. Towson and Dr. Riley.

Gooseberries by Mr. Cammack, (noble specimens,) Mr. Ouseley, and others, and the strawberries and canteleupes of Mr. Wm. Lack (Mr. Agg's gardener) were only equalled, not surpassed, by any others in the room.

Currants, only by Mr. Ouseley.

Apricots by Dr. Bayne and Mr. J. F. Callan.

Green-house fruits, Lemons and Oranges, by Mr. A. Suter, Dr. Riley, and Dr. McWilliams—Their contributions did them great credit. Other valuable contributions were made by gentlemen whose names will appear in the official report of the Committee of Arrangements.

VEGETABLES.

From "Wood-cut," Prince George's county, Md. fine specimen of early May pease.

By Dr. Bayne: Six early yorks, one weighing 6 lbs.; paucalio savoy, 4 lbs.; and fair specimens of the string beans, mercer potatoes, and green tomatoes.

By David Barry, James O'Grady, gardener: Six cucumbers, six early yorks, one weighing 3½ lbs. four silver-skin onions, 2 lbs. very good beets and tomatoes.

By Robert Y. Brent: Two stalks of asparagus weighing 6½ ounces.

1 stalk measuring 9 in. in length & 4 in. in circ'e.
1 do do 7½ do 4½ do

By John A. Smith: three fine early yorks, this spring's sowing, bunch turnip beets, and two frizzled Malta Cos lettuce.

By Joshua Pierce: Three long frame cucumbers of great length, two short prickly do. four royal cabbage lettuce.

By Chas. H. Wiltberger: Two brown Malta lettuce, one weighing 2½ lbs.

By Wm. Cammack: Six long frame cucumbers 20 inches in length, asparagus, four fine caulidowers, four Asiatic lettuce, a very fine and rare vegetable, a fine specimen of the ash-leaved kidney potato, and a bunch of horn carrots.

By Adam Lindsay: Very fine bunch of beets, three long frame cucumbers from 14 to 18 inches long, rhubarb, and early yorks, this spring's sowing, 2½ lbs.

By Mrs. Seaton: Very good asparagus, bunch of beets, good specimen of potatoes, and two cabbages.

By Mrs. Foxall: Two bunches of the giant rhubarb, bunch of turnip beets, and sea-kale, all very fine.

By Mr. Suter: Two heads of lettuce.

By Notley Young: Six fine clove onions, early yolk weighing 4 lbs.

By John Slater: Two early yorks, 4½ and 5lbs. bunch clove onions.

By Mr. Lack, gardener for Mr. Agg. Two cabbage lettuce, two bunches of giant rhubarb, and a fair specimen of the ash-leaf kidney potato.

By Mrs. Nicholls: Fine bunch of beets.

By John Douglas. Fine string beans, fine early horn carrots, one bunch fine white summer radishes, one do. yellow do. and six white clove onions, 2½ lbs.

By Michael Gaffney, gardener for Georgetown College: Five early yolk cabbages, 3½ lbs. each, fine tomatoes, and a bunch of *finocchio*, (a very excellent salad,) and very superior potatoes from open grounds.

By John Ouseley, gardener to the President of the United States: Two heads of globe artichokes.

Among the other objects of curiosity and admiration which were exhibited on this occasion, a number of silk-worms in a healthy and thriving condition seemed to be very conspicuous; these silk-worms were sent in by Mr. Adam Lindsay, the father of the Columbian Horticultural Society.

[From the Northampton Courier.]

CULTURE OF SILK.

From various sources of information, it appears that our climate is better adapted to the culture of Silk than even Italy or France—where the

silk worms' eggs are often hatched by artificial heat, and sometimes are carried and hatched in the warm bosoms of the peasant women. This fact is corroborated by the personal observation of Gen. Tallmage.

Our climate is not so variable or severe as to require such tender care in hatching the eggs, or application of artificial heat during the feeding process. It is well known to our feeders that the worm may be safely and profitably fed in our open sheds or barns. May not this exposure be one cause why the fibre of American grown silk is stronger than the imported, and the waste less? And why is it not reasonable that worms tenderly nursed, should not only produce a feeble progeny, but furnish tender silk, subject to waste?—The cold of our winters does not injure, but evidently hardens the eggs; on this account would it be advisable to raise eggs at the north to supply the south?

In regard, however, to the preservation of eggs, experience has taught, that not only maturity of age is required, but that one uniform protection from autumn to the time of hatching is advisable. If, near the time of hatching, eggs are removed to a cooler situation, even to an ice house, it does not appear to impede premature hatching. To keep eggs from hatching until wanted, it has been recommended that they should be placed on ice in the ice house, as soon as the ice is taken in.

Within the last year, silk worms' eggs have been transported from Canton to the Sandwich Islands, for Mr. S. Peck. Mr. Peck is now visiting us, to witness our progress in the silk culture, and gain information of the most approved and perfect manner of reeling. He has a large mulberry plantation on one of the islands, consisting of the White, Black or Red mulberry, the *Multicaulis* and the genuine Canton imported from Canton—and has presented us with a leaf of the Canton, which corresponds with ours. He has also several million of seedlings, the product of seed from the Canton mission, such as was forwarded to Northampton, and now under cultivation. Mr. Peck says his nursery of seedlings will attain the height of 12 feet this year. He has excellent water privileges, and is preparing to do a large business in the growing and reeling of silk, and has already engaged 60 machines for reeling by hand labor, besides others for water power. He will immediately have several hands under a system of instruction in the reeling department, by experienced reelers. There are others expecting to go out in the autumn, to establish business on their own account, as well as to superintend his silk establishment. He can make silk at a cheap rate, native labor being only 12½ cents per day.

The eggs which were sent to him from Canton, were deposited on paper by the millers, and overlaid with a thin, white varnish, or solution of gum arabic, to exclude air or moisture,—with directions, that when wanted for hatching, to use a brush and warm water to dissolve the gum or varnish. From our set of Chinese paintings, illustrating the whole process of silk culture in China, it is evident that the Chinese varnish the eggs for some purpose,—and before hatching, wet them with warm water, spread the papers on bamboo poles for draining. This dilution with warm water may facilitate the process of hatching. It

may be of use to try the experiment of varnishing eggs with us, by a solution of gum arabic, when laid aside for winter: or to confine the eggs in some vessel surrounded by a mixture of glauber salt and nitre, instead of resorting to the ice house.

That the culture of silk merits the consideration and encouragement of Government, is made evident from the fact that there has been an annual increase of silk imported. It appears from public documents that in the year 1832, the value of silk imported was \$9,147,812; but in the year 1836 the amount was increased to \$25,033,200. With these facts before us, shall we not use every exertion to increase the growth of the raw material, not only for home consumption, but for eventual exportation?

There is no mistake in the conjecture that silk *must* and *will* become the staple of the Northern, the Middle, and even Western States, unless (Bartimeus like) we not only *cannot*, but *will not*, open our eyes upon the golden harvest which is spread before us, and may be gathered by any one who will put forth a diligent hand to the culture and growing of silk. A few enterprising individuals have already commenced operations, and it is sincerely hoped that their example will be followed by *thousands*, and their progress reported by the

INSPECTOR.

USE OF LIME FOR PRESERVING FENCES AND BUILDINGS.

Mr. Editor—Calling some time since on a friend of mine, who is a curious observer of things, he communicated to me, among other items of information, his method of painting, or rather whitewashing his buildings, to preserve them from decay. I was so much interested by its simplicity, as well as cheapness, that I took a memorandum at the time of the materials used, expense, &c.

The materials are common salt and lime. Put about a quart of salt to a pail full of water, or rather as much as the water will dissolve. Then add fresh slackened lime—enough to give the proper consistency to apply with a brush. It should not be too thick, as that will cause it to peel off—and it will be necessary to put on two coats.—He says you may add paints, if you please, to give it a different color. The whole expense of the materials, and putting on the same, would not exceed two dollars and fifty cents, for a house 36 feet long, 18 wide, and 18 high.

I find also, in looking over my papers, in the New York Farmer for April, 1836, the following recipe for an 'incombustible wash for buildings,' to render them fire-proof; and also a coating for brick work, to render it impervious to water.

Proportion for five gallons. The basis is lime, which must be first slacked with hot water in a tub, and covered to keep in the steam; it then should be passed in a fluid form through a fine sieve to obtain the flour of the same. Six quarts of lime, and one quart of clean rock salt for each gallon of water, to be dissolved by boiling, and skimmed clean;—then add to the five gallons, one pound of alum, half a pound of copperas, three-fourths of a pound of potash,—the last to be gradually added,—four quarts of fine sand, or hard woodashes, say hickory. You may add any colouring matter that your taste may dic-

tate. It should then be applied with a brush; and it will, it is said, look better than paint, and be as lasting as slate. It will stop the small leaks, prevent the moss from growing, and render the parts painted with it incombustible.

Peru, Jan. 1838.

J. H. J.

P. S. The 6 quarts of lime, I suppose, is for five gallons. [Maine Farmer.]

PARSNIPS.

There is much reason to regret that this vegetable is not more cultivated among us; and that its value for feed of cattle has not been tested.—We have never known a case in which it has been made the subject of field culture; and no one thinks of raising more than a few for table use in the spring. Our own cultivation has never extended farther than to the growing of 30 or 40 bushels in a season; but we cannot say why, excepting from sympathy with general prejudice and custom, we have not pursued it much more extensively, as we recollect having fed them to milch cows in the spring with very great advantage to their health and milk.

The cultivation of them is more easy than that of carrots; and the yield upon an acre is greater. The carrot plant when it first appears is not so distinguishable as the parsnip; and the weeding and thinning therefore are more troublesome.—The digging of parsnips is more difficult than that of carrots; but if planted on ridges, it may be greatly facilitated by means of a plough; and after all, the extra labor required is not a matter to be much considered. The parsnip likewise may be safely left in the ground until the spring; and then it furnishes in perfection a succulent food for cattle of the highest value, and at a season when it is particularly required. The butter made from the milk of cows fed upon parsnips is said to be distinguished by its fine flavor; and in parts of Europe, where it has been cultivated as a field crop it is stated that no vegetable food will produce more or finer beef or pork. There is no vegetable which is less liable to accident; none which has fewer enemies among the insect tribe; none for which a suitable soil is more easily found; and none which requires less expense of seed.—They are cultivated in the same way as carrots; and we recommend for all vegetables that they should be sown on ridges, and in as strait lines as can be drawn. For parsnips as well as carrots,—as there is always a liability to sow the seed too thickly,—we advise mixing the seed with a considerable quantity of dry sand; and it may then be sown evenly either with the hand or a machine. The human hand however, where there is not too much to be done, is doubtless the best of all machines. We advise likewise that carrot seed should be moistened before sowing. It will then appear early above ground before the weeds show themselves. We cannot say that the same method would not be advisable in regard to parsnips. We recommend that a trial should be made; but we have made no experiment of this matter ourselves. Parsnip seed is usually long in coming up; and on account of weeds it is very desirable to forward them.

Parsnips may be sown in the autumn or the spring. The almost universal opinion is, that if sown in the spring it is indispensable that they should be put in very early. We have the testi-

mony of two or more intelligent farmers, that they have succeeded better by late sowing than by early; and they avoid sowing until the last of May. This was a new fact to us. In this case we should deem it the more desirable if possible to forward the seed by some artificial means before planting.

It is stated upon analysis parsnips yield 90 parts of nutritive matter to 1000, and that of these 9 parts are mucilage; the rest saccharine matter.—As an article of human food they are not a favorite with most people. This, we believe, arises from their infrequent use. Probably they are quite as palatable and acceptable as potatoes were when first introduced. When sliced and fried in batter like the salsify or vegetable oyster plant, which is so much esteemed by persons of taste, they are not easily distinguished from it.

The leaves are said by some to make good feed for cattle, but this does not accord with our own observation. As far as that goes, cattle are seldom inclined to touch them.—*New England Farmer.*

BLUE GRASS.

This grass, which constitutes the glory of Kentucky pastures, is esteemed superior to all others for grazing. It flourishes only on calcareous soils. Opinions and practice vary here, as to the best time of sowing it—some preferring September for the same reasons, chiefly, which relate to timothy or other grasses, others preferring February or March, to obviate the danger of the tender roots being winter killed. It is sown either on woodland or open ground—in the latter case most generally after a succession of exhausting crops in old fields. If sown on woodland, the leaves, brush and trash must be raked off or burnt. It is particularly important to burn the leaves, else the seed may be blown away with them by the wind, or if not blown away, the leaves may prevent the seed reaching the earth, and thus defeat their germination. Many of those who sow in winter, prefer casting the seed on the snow, as it enables them to effect the operation with more neatness and uniformity. In woodlands, the grass must not be grazed the first year, or at all events, till after the seeds have matured. In open land, the practice has been adopted by some, of mixing timothy and clover with blue grass, in which case half a bushel of the latter seed to the acre is sufficient. The advantage resulting from this is, that it secures at once, a well covered pasture that will bear considerable grazing the first year. The blue grass, in a few years, expels the other grasses, and takes entire possession of the field. On open ground, it is frequently sown in March upon wheat, rye or oats. If the season is favorable, it may be sown in April; but should the weather prove dry, a great portion of the seed will be lost. It is the practice, we believe, of most graziers, to put upon a given pasture, as much stock as it will maintain, without shifting them during the season, as besides saving labor, it renders the cattle more quiet and contented. Others, however, fence off their pastures into separate divisions, to undergo a regular succession of periodical grazings. This plan secures a constant supply of fresh grass, very grateful to the animals, and is believed to be more economical, as much less is trampled and rejected by the cattle. The number

of animals to the acre must depend upon their size and the quantity of grass. The grass on open ground is much more abundant, sweet and nutritious, than on woodland, and consequently will maintain much more stock, perhaps nearly twice as much; while open woodland will produce much more and better grass than that which is deeply shaded. The best graziers extirpate, as fast as possible, every tree not valuable for timber or wanted for fuel, and some even prune the branches of those which are allowed to remain.—But we shall soon, we hope, be able to present this subject more at large, in some numbers which are preparing, on the grazing and stock feeding system of Kentucky, which we trust will prove interesting to all our readers and particularly instructive to the farmers in the southern portion of the state and Tennessee. Although we wish well to the tobacco growers on Green river, and would lend our aid to promote their particular interests in that pursuit, we wish they could be persuaded to adopt in its stead, the grazing business; for we are confident it is a more productive and certainly a more agreeable and less laborious one.—*Franklin Farmer.*

VALUE OF DURHAM CATTLE.

The enquiry is often put—“what can justify a farmer in giving the enormous prices demanded and obtained for Durham cattle?” We could easily give a number of reasons which we deem satisfactory; but at present will offer but one, which we think sufficient. A thorough bred bull may be bought, say \$500, which we may assume as a fair averaging price—for the prices range from \$300 to \$1000. Now the point of the question is, how can a bull pay back in substantial benefits, the \$500 paid for him? We will give a fair answer to the question; and show that the sum is returned, not merely in blood or pedigree, but in the actual improvement of those qualities in the animals produced from the bull, which every cattle raiser most desires. A good bull can safely serve 50 cows a season without injury to himself—and many have served from 80 to 100—but let us take 50. To put the proof to the severest test, we will suppose that these 50 cows are all of common stock, and that their calves are all destined for the butcher and not one kept for breeding. The question then is—“will the fifty calves pay in beef, a fair return for the sum expended in the purchase of the bull?” We answer yes; and, without going into any tedious calculations to show how much more beef they will make in a given time, than the common stock—or how much earlier they will mature—or how much time, risk, food, money and interest, are saved—we will demonstrate the truth of our opinion in the statement of the fact, that the large graziers of Fayette, Clarke and Bourbon, will give ten dollars a head more for half blood Durhams, at two years of age, merely for fattening for the butcher, than they will for common cattle at the same age. Now these graziers know perfectly well, the value of every description of cattle in the country for fattening, and they would not surely pay so much more for the half blood Durhams, than for others, if they were not justified in doing so by making a better profit from them. It is to be recollected, too, that these large graziers buy their young cattle—for none of them can

breed one in ten of the number they fatten and sell. Now here are fifty calves, the produce of one season, whose superior qualities at two years of age, pay \$500, (the price of the thorough bred bull) more to the breeder, than the same number of common cattle. It is needless to run out the demonstration further. Every farmer can calculate for himself the advantages of breeding several years from the bull—the greater the number of calves he could get than that we have assumed—the superior value of the heifer calves for breeding instead of butchering, &c.; and we believe no one who will candidly examine the subject, can doubt the economy of procuring, even at their high cost, this invaluable breed of cattle. When this breed shall become so widely diffused as to constitute the general stock of the country, then, and not till then will their price be graduated, like that of other cattle, by their intrinsic value merely for milk and beef.—*Franklin Farmer.*

RUTA BAGA.

QUESTIONS AND ANSWERS.

What is the average crop of Ruta Baga, to the acre, on land well manured and taken care of, in Maine?

Answer.—Six hundred bushels—each bushel weighing 64 pounds, after being well cleared of tops, dirt, and small roots. Much greater crops have often been produced; ay, from one to two thousand bushels to the acre, or at that rate on smaller roots.

What are they worth, ton for ton, or pound for pound, for stock compared with good English hay, corn, potatoes, apples, &c.

Ans. When properly fed out, they may save hay, pound for pound; because if kept in any considerable quantities, stock may be kept in good condition, if poor hay, or even straw be added.—They are worth more than potatoes in equal weight; and as much as apples, and less liable to decay. To keep a creature in decent flesh, with hay, 5 bushels of Ruta Baga, are equal to a bushel of meal.

What kind of stock is best and most profitable to feed them to?

Ans. All kinds: horses and swine not excepted. If they refuse them at first, let them become hungry, and they will soon eat them well. I have wintered swine on them in a raw state. They are worth for them certainly as much as potatoes—and are most excellent for sheep.

What is the cost to raise them per bushel, compared with potatoes?

Ans. Much less; as they yield much more on a given quantity of land; their seed and planting cost less; their hoeing more; and their leaves pay the harvesting.

Are they not more exhausting to the land than potatoes, or most other crops?

Ans. They are: as much more weight is taken from the soil than by other crops. I think no one ought to object to having a large crop, because it takes more from the soil than an inferior one; but it should be known that Indian Corn will not grow well the next year after a large crop of Ruta Baga, as each require from the soil similar quantities.—*Maine Farmer.*

A strawberry measuring 7 in. in circumference, weighing 1½ oz. was lately plucked near Whitby.

GEOLOGICAL SURVEY OF MARYLAND.

By PROFESSOR DUCATEL.

(CONTINUED.)

SEC. IV. *General Remarks on the Agricultural condition of Montgomery county and the means of improving it.*

It will have been gathered from the preceding account that the agricultural condition of Montgomery county is far from being flourishing. At a few points only have attempts been so far made to improve it, and yet wherever these attempts have been made they have been signally successful. The valley of Hawling's River, and the vicinity of Brookville have already been instanced, and there are several farms in other directions, which by the use of clover and plaster with sometimes the combined agency of lime, have been entirely reclaimed from a very impoverished condition to one of considerable fertility. That similar results may be obtained on nearly the whole of the waste lands of the county I entertain no doubt.

A close examination into the actual condition of much the greater proportion of soils in the county has led me to two important conclusions: 1st. That superficial portions of these soils alone are in an unfit condition for a healthy vegetation, and: 2nd. That they are generally very acid and readily improved by lime. The former condition suggests the propriety of adopting the system of deep ploughing; and this is confirmed by the experience of some farmers, together with the observation of one fact made in several places, that wherever it has occurred to the proprietors to apply to the soil the loose sub-soil formed by the decomposition of the subjacent rock which is obtained in digging wells, a marked degree of fertility is always found to have been imparted. On the other hand the acidity of the soil can in no way be more effectually cured than by the addition of lime. Lime, however, besides acting as a corrector of that disposition which some soils have to throw up an acid growth, as pines, sorrel, briars, &c., that interfere and sometimes entirely prevent a more useful vegetation, will amend the soil in other ways. It will improve it mechanically, by giving body to a loose soil, and loosening a stiff one; and it is conceived that it will act *chemically*, converting the putrescible manures applied along with it into soluble compounds, from which the crops may derive a nourishment. It is, moreover, now generally admitted, that no soil can be relied upon to produce good grain crops, especially wheat, that is deficient in calcareous matter. Accordingly many opportunities have presented themselves of verifying the fact, that the decomposition of those rocks containing lime as one of their constituents, always yields a soil naturally favorable to the growth of wheat.

If these views be correct, it follows that the system to be adopted by the farmers of Montgomery county is to plough deeply, and to lime freely. As to the latter operation, it needs but few simple directions for carrying it on. Supposing a waste field to be under process of improvement, and that it be deemed advisable to plough deeply, it would seem proper to complete that operation first, and when the land is prepared to add the lime, in the proportion of fifty bushels to the acre, which must be harrowed in afterwards. At the second tillage,

or when a good layer of clover has been obtained, then fifty to one hundred bushels more to the acre should be applied upon the sward, and turned in at a moderate depth. On the other side, should the liming be carried on upon a field already under good cultivation and previously improved by the use of clover and plaster, the best plan appears to be to apply the lime upon the sod and both to be ploughed in together. In the latter case eighty to a hundred bushels of lime may be used in the first instance, and 50 bushels more on a second tillage. There can be no doubt that by proceeding in these ways most of the now waste lands of the county would be effectually reclaimed, and those already improved rendered infinitely more productive.

As to the objections made against the *cost* and *quality* of the different kinds of lime within the reach of the farmers of the county, they may be easily removed.

In reference to the cost, whatever it may be, short of a very unusual estimate put upon the material, it may be confidently asserted that it cannot be beyond its actual value. At the places where it is now accessible to the people of the county it sells for from 16 to 25 cents a bushel, and the greatest distance to which it has to be carried is fifteen miles. The experience of those who have tried it under these circumstances is, that it amply repays itself in a very short time. Indeed if it be reflected, that there is good reason to believe that the improvement brought about by lime is a permanent one, it must appear that at double its present price, it would still be the cheapest, as well as the most effectual resource. To those who are alarmed at the first cost, and who consider it a hardship to invest twenty-five dollars an acre on lands that have originally been bought at only ten dollars, it may be observed that, thereby, their value becomes enhanced ten-fold; that is, they will then yield a full interest, with very little additional labor, upon one hundred dollars instead of upon ten. Where the capital necessary to carry on the operation is not at command, there would be an obvious propriety in disposing of one third, one half or even three-fourths of a farm to improve the balance; since it is easier and infinitely more profitable to cultivate one hundred acres of good land than four hundred of an impoverished soil. There is an estate in Montgomery county, now in the market at five dollars an acre, to which an expenditure of twenty-five thousand dollars in lime and stock, would give an additional value at least of one hundred thousand dollars. It extends along the east side of Seneca from the vicinity of Darnsville to the Ohio and Chesapeake canal, embracing fifteen hundred acres of land, well wooded and abundantly watered, presenting sites with extensive prospects, and withal remarkably healthy. This estate belongs to Richard Smith, Esq. of the District of Columbia.

The quality of the lime intended to be used is certainly an object of interesting consideration to the farmer, but he is not to suffer himself to be prejudiced against any particular kind from some supposed impurities which it may be thought to contain. The quality of the lime may be impaired in two ways; by inherent impurities in the stone from which it is obtained; or by an injudicious mode of burning. In the former case there is but little to be feared for agricultural purposes, as the

ordinary constituents of those limestones that are at all capable of being converted into lime, have no injurious properties in themselves; not even in the case of those that contain a large proportion of magnesia, which would prove hurtful to such soils alone as are already overcharged with this earth. The analysis of two specimens of limestone furnished by Mr. Ignatius Waters—No. 1 being considered of the best, and No. 2 of the most inferior kinds obtained at his quarries, gave the following result:

No. 1.		No. 2.	
Carbonate of lime,	88.5	Carbonate of lime	76
Silex,	8	Silex,	18.5
Magnesia,	a trace.	Magnesia,	2
Undetermined,	5.5	Undetermined,	5.5
100		100	
Two specimens received from Mr. Penel Palmer gave			
No. 1.		No. 2	
Carbonate of lime,	88	Carbonate of lime,	80
Silex,	10	Silex,	11.5
Magnesia,		Magnesia,	3
Undetermined,	2	Undetermined,	5.5
100		100	
Two specimens selected by myself, yielded			
No. 1.		N. 2.	
Carbonic Acid,	42.5	Carbonic Acid,	39
Lime,	54	Lime,	45
Silex,	3.5	Silex,	13
Magnesia,		Magnesia,	9
100		100	

These analyses show that the limestones now most in use in the upper parts of Montgomery county, are upon an average equal to the majority of those burnt in the other parts of the State; the limestones obtained from the Fredericktown valley are equally free from any impurities that might impair the value of the lime obtained from them.

As to the other circumstance impairing the quality of the lime, namely, the imperfect burning of the stone, it deserves some consideration; for, unless the stone be well and thoroughly calcined the lime it yields will be filled with *core*, adding to its weight and bulk a material of no use to the soil, as it can never become incorporated with it. It behoves the farmer, therefore, if he burn his lime himself to have it well done; or if he purchase it he should see that it is in a pulverulent state, as free from lumps and *core* as possible. Upon the subject of lime-burning, there is much yet to be enquired into, and I have reason to believe that the results of a series of experiments and inquiries that have been commenced, will enable me, at a future period, to suggest some valuable improvements in this art. The investigation relates to the best mode of constructing the kiln, the most expedient manner of disposing of the stone for its perfect calcination, the best kind of fuel, and to the most economical employment of it. The importance of the subject will at once be appreciated, here and elsewhere, when we are told that in our most usual modes of burning limestone we obtain scarcely more than six hundred bushels of lime with sixteen cords of wood, whilst we are informed that the perpetual kilns of Pennsylvania yield seven hundred bushels for every eight cords of

wood and 1 ton and a half of anthracite consumed, and in New York *two thousand* bushels of lime are burned with *twelve* cords of wood.* If it be found practicable to introduce improvements in the construction of our kilns that would enable us to realize such results, the immense benefit that would accrue to those portions of the State, as in Harford and Baltimore counties, where twenty or thirty kilns are almost constantly in operation in one vicinity, will be readily conceived.

Having failed, so far, to discover any limestone within the limits of Montgomery county, my next object was to ascertain what facilities existed for obtaining it elsewhere. Its transportation by the Chesapeake and Ohio Canal from the limestone valleys of Frederick and Washington counties, along the whole Potomac side of the county, affords a cheap and convenient means of procuring it in this direction, and it should be taken advantage of at all those places whence the stone or the lime can be easily distributed. Kilns have been erected at Georgetown, where it is understood the refuse lime is sold at 16 cents. It has been used with entire success by some farmers on the road to Rockville. At the mouth of Seneca, Mr. William Darns is about to build two kilns, from which he expects to distribute lime to the neighboring country at 25 cents a bushel. Similar enterprises might be undertaken at the mouth of the Monocacy, at the Great Falls, and in other equally eligible situations along the margin of the canal. Good compact limestone may be obtained in a low ridge lying between Bennet's creek and the Monocacy, W. of the Sugar-loaf mountain, on the farm of Mr. Simmons, where it was formerly quarried for the purpose of converting it into lime. There is also a kiln erected near the Baltimore and Ohio Rail Road, at its intersection of the road leading to New Market, which is supplied from the Fredericktown valley, but there is reason to believe that stone sufficiently pure for agricultural purposes occurs in its immediate vicinity. But the direction from which the county has been so far most abundantly supplied is in Anne Arundel county from a narrow valley about 5 miles in length, running in a N. and S. course between Green's and Snell's bridges. At its N. extremity it branches off to the E. in the direction of Clarks-ville. The limestone of this formation is associated with primary rocks, being in some places so mixed with mica as to cause it to be easily quarried into slabs; it also contains a large intermixture of quartz. The lines of stratification run N. E. and S. W., and the ledges dip W. with an inclination to the E. at an angle of 40 to 50 degrees. The stone is principally quarried at the bottom of the valley, though it occasionally crops out on the sides of hills, that are low with gently undulating surface. In one locality a mass of coarse granite breaks out at a higher elevation on the hill side, and in another a well defined mica-slate covers the bed of limestone, which is always much more mixed with mica in its upper strata, so as to render it unfit for calcination. On the other hand, the inferior strata are free from mica, and consequently yield a very good lime, and yet again the admixture of siliceous and mica is sometimes so great as to occasion the fusion of the

rock, when the fire of the kiln has been too much urged, or prolonged beyond a proper time. The stone is delivered at the quarries for 1 dollar a perch, it is quarried and burnt for 50 cents, and the lime sells for 16 cents a bushel.

I take the liberty of mentioning the names of several farmers who are engaged in quarrying and burning this limestone—Messrs. John Hawlings, William Adams, Ignatius Waters, Nathan Haynes, Samuel Cecil, Penel Palmer,—Tyson, Mrs. Lee and Mr. Washington Gaither—to whom, as well as to others, I would suggest as advisable, that wherever there is a sufficiency of wood the kilns should be built upon the farms, and the stone carried to them, to avoid those accidents to which the lime is liable during transportation, and by which its qualities for agricultural purposes are greatly impaired. When it is only *air slacked*, as it is termed, it undergoes no injurious change, as it remains pulverulent, and is simply augmented in bulk, but if it becomes, accidentally, *water-slacked*, it is apt to run into hard lumps, that prevent it from being intimately incorporated with the soil, which is necessary for its quick and most successful action. Besides, some of the usual accidents of transportation are not likely to affect the stone, so as to occasion a total loss, which might be the case were the lime cart to become stalled during an unpropitious season. Those farmers who have no quarry of their own, and who possess facilities for burning lime, will probably find it more convenient to purchase the stone, than the lime, as they may select their own time and opportunities for burning it, and not remain dependent upon contingencies to obtain it; since it may sometimes happen that after contracting for it, it may not be ready for delivery when they are prepared to receive it, or the reverse, in which case it remains exposed and liable to injury. Again, by burning the stone upon their own premises, they have the refuse parts of the kiln, and the ashes, which may likewise be put to good account.

In thus urging upon the farmers of Montgomery county the free use of lime upon their lands, it is done with the conviction that it is the most efficient means they have at command to restore most of that which is in a very impoverished condition, and of imparting to all a degree of permanent fertility that cannot be attained in any other manner. Lime, in truth, appears for them to be the chief desideratum, as almost all the other advantages that a country can possess for carrying on agricultural pursuits profitably are here to be found; an improveable soil, a sufficiency of woodland, abundance of water, numerous sites for meadows, and the proximity to a populous district, seem to render it peculiarly adapted to farming, and should encourage its inhabitants to turn their attention, not only to the production of the great staple commodities of our State, but to the formation of dairies, the more extended cultivation of their root crops, of vegetables, of fruits, and, in fine, to all those resources of a farm that go to supply the wants of a large community. On the other hand, the great salubrity of the country, the unfailing supply of delicious water, together with its vicinage to the seat of the national government, renders it no less eligible to gentlemen of fortune and leisure for the selection of delightful rural retreats. It behoves the people of Mont-

gomery to show, by well-conducted experiments, that nothing that has been stated in reference to the facility with which their lands can be made highly productive, at comparatively a moderate cost, has been exaggerated.

[From the Genesee Farmer.]
FIRE BLIGHT.

Mr. Tucker—I have this day noticed an article in your Farmer of the 31st ult. controverting my theory of the cause of the *Fire Blight*, by Mr. Lazell of Ohio. From the general tenor of his communication, I am quite satisfied that he is ignorant of the true blight, and that his trees died solely from the effects of cold; the consequences would be nearly alike in both cases. If a frost should destroy all the leaf buds after they were expanded and in full vigor of sap, there would be a strong exertion of vitality to renew them by pushing out new leaflets; and in all those cases in which there were few, and not a sufficient number to elaborate the ascending sap, a stagnation ensues, fermentation commences, the whole mass is vitiated, and the tree dies. This is all right, and according to the laws of necessity.—Moreover, Mr. L's case is not a solitary one, and in no way varies from many other instances which occur from the destruction of the leaves by the cankerworm, the caterpillar, or any other case in which trees are denuded of their leaves.

Now what are the facts with respect to the blight now known as a specific disease. It has prevailed through the whole Eastern states for the last twenty years, and so severe have its ravages been in the neighborhood of Boston, that many of the old and fine varieties are in danger of becoming extinct. For the information of those parts of the country where it does not prevail, I will here state the manner in which it commences. Some years some particular neighborhoods are more subject to it than others, but in no one year, for the last twenty, has one past without my observing more or less of its ravages; which, I think, is conclusive, that severe frosts were not, and could not be, the sole cause of the disease. It commences in July, generally, and continues to affect trees during all the hot weather of summer; it commences at the end of a twig perhaps only six inches long, or it may first affect two or three feet; the leaves wilt, as though they were severed from the main branch; they immediately turn black, as does also the cambium, and shortly the whole wood, accompanied by a smell precisely like green wood and leaves when scorched by fire, and from which it derives the name of *fire blight*; a whole branch is shortly affected, and finally the whole tree. It may be effectually stopped in its early stages, by cutting off the diseased branch down to some point where a healthy limb branches off. Its appearance is sudden, without any warning, and those who wish to preserve fine fruit where the disease prevails, must not rely upon praying to Hercules, but must watch also, and act promptly. It attacks the *Apple*, the *Quince*, and the *Pear*, exclusively as far as my observation goes. I am not *balky*, Mr. Editor, and I do not "give it up," from the case cited by Mr. L. I still assert, and most fully believe, that no tree was ever struck with the real *fire blight*, until it had arrived at the period and age of blossoming; and that no branch or twig was ever affected with

*Professor Shepard's Report on the Geological Survey of Connecticut.

it, except a decayed and diseased fruit, or its process was at its extremity. If it does, my theory falls to the ground, and I will back out so short that it shall be a *caution* to all speculative theorists hereafter. But if any person will show a well attested case to the contrary, I hereby engage to exhibit to him the secret and hidden arcana of nature, and the *modus operandi* by which she changes wheat into chess, which I think, is a disparity of information worth the attempting a pretty full and close observation of the disputed points.

PYRUS.

Littoria Farm, Greece, April 20, 1838.

CULTURE OF TROPICAL PLANTS.

Having accidentally seen the manuscript of the following letter to the Hon. LEVI LINCOLN, from a gentleman as well acquainted as any other in the country with every thing relating to Horticulture and Arboriculture, we have placed it in our columns as well for information to our readers on the matter which it treats of, as to show to them that the estimable writer has lost none of that zeal which has always distinguished him in the pursuit of objects likely to be useful or beneficial to his countrymen.

Hawthorn Cottage, Roxbury, April 17, 1838.

MY DEAR SIR,—I am very much obliged to you for the report of the Agricultural Committee on the memorial of Doct. PERRINE, in relation to the culture of tropical plants in Florida, which you were so kind as to send me. I have read it with the deepest interest, instruction, and pleasure; and so favourably do I think of his honorable and patriotic enterprise, that I most sincerely hope Congress will cheerfully and promptly grant his request, and aid him in the most liberal manner.

The introduction of a single plant, or seed, has, in all ages and nations, frequently produced the most important and valuable results. The mighty influence on the agricultural industry and the general prosperity of empires which the naturalization and culture of the cereal grains, the olive, vine, white mulberry, for the silkworm, the sugar cane, coffee plant, cotton, potatoe, rice, and tobacco, have produced, is well known; and I have no doubt that several of the plants which Doct. Perrine has now growing at Cape Florida and Indian Key may speedily become staple articles of cultivation in several of the most southern States.—Besides, I do not think so meanly of the capabilities of the soil of Florida as most people. I well remember that Louisiana was called a mere alligator swamp when first, so cheaply, acquired.—The single fact that East Florida is the *only portion* of the Union where many of the most *precious tropical plants* can be *acclimated*, will, at no very distant period, bring every acre of land into great demand for tillage. It will be drained, diked, embanked, and converted into various kinds of plantations.

What was Holland before the dikes and canals were constructed? What has made the cotton and sugar estates of Lower Louisiana so prolific, but the *levees* for restraining the overflowings of the Mississippi? What the rice fields of South Carolina and Georgia? Human genius and indomitable industry. Where there is a cheering prospect of reward, they will triumph over all na-

tural physical difficulties. We know the knights of Malta made fertile gardens on the barren rocks of that island, so celebrated for their chivalric deeds, and as the site of Paul's shipwreck, by pounding up the loose and scattered stones which covered its bleak surface, and importing soil from Sicily to mix with their dust. The Mexicans had floating gardens on the lake Tezcuco, where their capital city was established. The Chinese have long resorted to the same means of rearing culinary and others plants, and not an inch of soil, even though situated amidst the precipitous cliffs of the mountains, is untitled, so great is the demand for vegetable products by the thronged population of the Celestial Empire. The lemon and orange groves of Portugal and Sicily are established and maintained by an expensive and laborious system of artificial fountains and channels of irrigation. With us land is so abundant, in comparison with the population, that we have no just conception of its value, as estimated in those portions of the globe where the inhabitants are so numerous that a few roods are considered an estate so ample that the fortunate proprietor is accounted an independent man.

But, even in the vast extent of the U. States, with the millions of acres still in a state of nature, how many thousands are now cultivated which, a few generations since, ay, in our day, were deemed worthless? In England, what extensive morasses have been reclaimed, and added to the domain of agriculture, while the heath-covered mountains of Wales and Scotland are rapidly being planted with magnificent forests, not for embellishment merely, but as inexhaustible sources of wealth. The old Duke of Athol planted on his estates in Perthshire 15,533 acres, which contained 27,431,600 young trees; and his successor set out 6,500 acres of poor mountain ground solely with larches. The land was not then worth over 22 cents rent per acre, and now, with the timber on it, is valued at \$2,500,000 dollars. The citizens of this country have, here and there, selected the most fertile and eligible locations, and call most of the vast remainder of the land either refuse or worthless. Time, and the increase of population, will show that nearly the whole will become more valuable than even what is now deemed the most choice. The embankments in the vicinity of New Orleans will be extended on each bank of the Mississippi, from the Gulf of Mexico to the Falls of St. Anthony.

If but one of the most valuable of the two hundred plants introduced by Dr. Perrine can be successfully cultivated, all Florida will be drained, and become luxuriant fields and gardens, and embellished by canals, rivers, bays, harbors and beautiful lakes. It will be the Cuba of this nation.

I know your liberal disposition, and enlightened and enlarged views in relation to subjects connected with agriculture, and all the great branches of national industry, and am confident you will be disposed to do what is expedient on this occasion.

Dr. Perrine, like most men of science and ardent patriotism, has devoted much time, and expended his resources, for a great purpose, sanguine in the beneficial results to the Republic, and the hope of future remuneration from his own practical exertions; and it is very desirable that

he should not be left, as is too often the case, to lament his labours, and to find that others, hereafter, reap the fruits of his meritorious enterprise, without having endured any of the toils or expense of a first experiment. Congress must be as munificent to him as would have been Henry IV. and Napoleon, to render his indefatigable researches and intelligence useful and honorable to himself and the country.

With assurances of the highest respect and esteem, your most obedient servant,

H. A. S. DEARBORN.

Hon. LEVI LINCOLN.

HOW TO DESTROY GRUB WORMS.—We have seen the following method in some paper recommended for destroying the common grub or cut worm, which cuts off young cabbages, beets, corn, &c., and think the plan is so reasonable as to be entitled to an experiment. Make a wheel or cylinder pretty heavy, with small blocks of wood projecting from the external surface, like cogs, about six inches apart and four inches long. Roll this wheel about towards night amongst the plants. This will make a hard smooth path, with a hole of the size of the cog, every six inches on the way. The worms at night come out in search for plants. They will prefer to crawl along the smooth path made by the wheel, till—pop, they fall into the hole. The rest of the night they will busy themselves in ineffectual attempts to get out, and in the morning you may walk along and gather the worms—and destroy them. There is some philosophy in this plan to outwit a worm.

[Augusta Banner.]

MAKING BUTTER.—Putting a pint of cold water during the summer months in each pan of milk when strained from the cow, will materially aid in these desirable objects: The milk will not sour as quick, and the cream will rise more perfectly. The reason why butter becomes rancid so soon, is owing to the imperfect manner in which the milk, frequently soured before churning, is separated from the butter. Retarding the souring of the milk by the application of cold water, obviates the difficulty.

MODE OF PREVENTING THE RAVAGES OF INSECTS.—A Petersburg paper states that the water in which potatoes have been boiled, sprinkled over grain, plants, &c., completely destroys all insects in every stage of their existence, from the egg to the fly.

THE CROPS.—For the last ten years, the crops of every description, have not looked more promising than at the present time. This is not confined to this township or county, but everywhere throughout the State, as well also as the entire Union. The accounts that reach us from every quarter, bear evidence of the same gratifying prospects. Not a desponding line have we yet seen, and we hope that even the croakers will, this year, be shamed out of their old habits.

[Germantown Tel.]

A DURHAM BULL.

For sale, a superior Bull—he is of fine size and unexceptionable pedigree, which will be given next week—he comes from a strain of deep milkers, and is himself the sire of several fine animals. Price \$500. je 26 3t

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every Monday

	PER	FROM	TO
BEANS, white field,.....	bushel.	1 00	1 10
CATTLE, on the hoof,.....	100lbs	9 00	10 00
CORN, yellow.....	bushel	72	73
White.....	"	69	70
COTTON, Virginia,.....	pound	9	11
North Carolina,.....	"	10	11
Upland,.....	"	9 1/2	11
Louisiana—Alabama.....	"	11	12
FEATHERS,.....	pound.	48	50
FLAXSEED,.....	bushel.	1 12	—
FLOUR & MEAL—Best wh. wh't fam.	barrel.	10 00	—
Do. do. baker's.....	"	—	—
SuperHow. st. from stores	"	7 87	8 00
" " wagon price,	"	7 37	7 50
City Mills, super.....	"	7 75	8 00
" extra.....	"	8 00	—
Susquehanna,.....	"	8 00	—
Rye,.....	"	4 50	4 62
Kiln-dried Meal, in hhd.	hhd.	18 00	—
do. in bbls.	bbl.	3 50	—
GRASS SEEDS, wholes. red Clover,	bushel.	—	11 00
Kentucky blue.....	"	2 50	3 00
Timothy (herds of the north)	"	2 25	2 50
Orchard,.....	"	2 00	2 50
Tall meadow Oat,.....	"	—	3 00
Herds, or red top,.....	"	1 00	1 25
HAY, in bulk,.....	ton.	10 00	15 00
HEMP, country, dew rotted,.....	pound.	6	7
" water rotted,.....	"	7	—
HOGS, on the hoof,.....	100lb.	7 00	—
Slaughtered,.....	"	—	—
HOPS—first sort,.....	pound.	9	—
second,.....	"	7	—
refuse,.....	"	5	—
LIME,.....	bushel.	33	34
MUSTARD SEED, Domestic, —; blk.	"	3 50	4 00
OATS,.....	"	33	34
PEAS, red eye,.....	bushel.	—	1 12
Black eye,.....	"	1 00	1 12
Lady,.....	"	—	—
PLASTER PARIS, in the stone, cargo,	ton.	3 62	—
Ground,.....	barrel.	1 50	—
PALMA CHRISTA PEAN,.....	bushel.	—	—
RAGS,.....	pound.	3	4
RTE,.....	bushel.	80	87
Susquehanna,.....	"	—	—
TOBACCO, crop, common,.....	100lbs	3 50	4 00
" brown and red,.....	"	4 00	6 00
" fine red,.....	"	8 00	10 00
" wrappery, suitable	"	—	—
for segars,.....	"	10 00	20 00
" yellow and red,.....	"	8 00	10 00
" good yellow,.....	"	8 00	12 00
" fine yellow,.....	"	12 00	16 00
Seconds, as in quality, ..	"	—	—
" ground leaf, ..	"	—	—
Virginia,.....	"	4 50	6 00
Rappahannock,.....	"	—	—
Kentucky,.....	"	5 00	8 00
WHEAT, white,.....	bushel.	1 85	—
Red, best.....	"	1 55	1 60
Maryland inferior	"	—	—
WHISKY, 1st pf. in bbls.....	gallon.	33 1/2	34
" in hhd.	"	32	—
" wagon price, ..	"	—	31
WAGON FREIGHTS, to Pittsburgh, ..	100lbs	1 25	—
To Wheeling, ..	"	1 50	—
WOOL, Prime & Saxon Fleeces, ..	pound.	40 to 50	20 22
Full Merino,.....	"	35 40	18 20
Three fourths Merino,.....	"	30 35	18 20
One half do.....	"	25 30	18 20
Common & one fourth Meri.	"	25 30	18 20
Pulled,.....	"	23 30	18 20

MORUS MULTICAULIS TREES.

The subscriber has from 25,000, to 30,000 Morus Multicaulis trees now growing at his residence, with roots of 1, 2, and 3 years old, which will be ready for sale this fall, and which he will sell on moderate terms

EDWARD P. ROBERTS.

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,.....	barrel.	—	—
BACON, hams, new, Balt. cured....	pound.	12 1/2	13
Shoulders,.....do.....	"	11	—
Middlings,.....do.....	"	11	—
Assorted, country,.....	"	8 1/2	9 1/2
BUTTER, printed, in lbs. & half lbs.	"	20	25
Roll,.....	"	—	—
CIDER,.....	barrel.	—	—
CALVES, three to six weeks old....	each.	5 00	6 00
COWS, new milch,.....	"	25 00	40 00
Dry,.....	"	12 00	15 00
CORN MEAL, for family use,.....	100lbs.	1 62	—
CHOP RYE,.....	"	1 50	1 60
EGGS,.....	dozen.	12 1/2	—
FISH, Shad, No. 1, Susquehanna, ..	barrel.	8 75	9 00
No. 2,.....	"	8 50	—
Herrings, salted, No. 1,.....	"	4 25	4 75
Mackerel, No. 1, ————No. 2	"	—	—
No. 3,.....	"	—	—
Cod, salted,.....	cwt.	3 00	3 25
LARD,.....	pound.	10	11

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

U. S. Bank,.....par	VIRGINIA.	
Branch at Baltimore,.....do	Farmers Bank of Virgi. 1 1/2	
Other Branches,.....do	Bank of Virginia,.....do	
MARYLAND.	Branch at Fredericksburg, do	
Banks in Baltimore,.....par	Petersburg,.....do	
Hagerstown,.....1 1/2	Norfolk,.....do	
Frederick,.....do	Winchester,.....do	
Westminster,.....do	Lynchburg,.....do	
Farmers' Bank of Mary'd, do	Danville,.....do	
Do. payable at Easton,.....do	Bank of Valley, Winch. par	
Salisbury,.....1 per ct. dis.	Branch at Romney, ... par	
Cumberland,.....par	Do. Charlestown, par	
Millington,.....do	Do. Leesburg, ... 1 1/2	
DISTRICT.	Wheeling Banks,.....3 1/2	
Washington, } Banks, 1 p. c.	Ohio Banks, generally 5 1/2	
Georgetown, } Banks, 1 p. c.	New Jersey Banks gen. 3	
Alexandria, }	New York City,.....par	
PENNSYLVANIA.	New York State, ... do	
Philadelphia,.....par	Massachusetts,.....1 1/2	
Chambersburg,.....1 1/2	Connecticut,.....1 1/2	
Gettysburg,.....do	New Hampshire, ... 1 1/2	
Pittsburg,.....2 1/2	Maine,.....1 1/2	
York,.....1 1/2	Rhode Island, ... 1 1/2	
Other Pennsylvania Bks. 2	North Carolina,.....5	
Delaware [under \$5].... 4	South Carolina,.....6 1/2	
Do. [over \$5].....1 1/2	Georgia,.....8 1/2	
Michigan Banks,.....10	New Orleans,.....8 1/2	
Canadian do.....10		

FOR SALE,

Two superior DEVON bulls, 4 years old this spring, of the purest blood in the country. fine form and remarkably large. Any gentleman wishing to procure one will find it to his advantage to embrace the present opportunity, as they will be sold at the low price of \$100 each, deliverable in Baltimore.

Applications in writing, post paid, to be made to the subscriber.

EDWD. P. ROBERTS, Baltimore, Md.

may 29

31

NEW BALTIMORE SEED STORE.

THE Subscriber having located himself in Grant street, near Pratt, three doors in the rear of Dinsmore & Kyle's Grocery Store, takes this early method of informing his friends and the public, that he has commenced the GARDEN AND FIELD SEED BUSINESS, and solicits a portion of public patronage. He has on hand and intends keeping, at all times, a constant and general assortment of the very best FIELD AND GARDEN SEEDS, a part of the latter, being of the last year's importation, and all the growth of 1837.

Also GARDEN AND FARMING TOOLS, of various kinds; a few barrels of ITALIAN Spring WHEAT; BADEN CORN, raised, and carefully selected by Col. Mercer—DUTTON; MANDAN; SIOUX; AND EARLY SUGAR CORN; CLOVER; TIMOTHY, ORCHARD, & HERD'S GRASS SEEDS; BUCKWHEAT;

OATS; MILLET, WHITE DUTCH CLOVER; LUCERNE; TREFOIL; SAINFOIN, ENGLISH RYE GRASS, &c. &c.

Farmers, Gardeners, Merchants, Captains of Vessels, and others, are invited to give him a call, as they can be supplied not only with Field and Garden Seeds, of all kinds, but also with PLOUGHS; HARROWS; STRAW CUTTERS; CORN SHELLERS; WHEAT FANS; WHEAT CRADLES, &c. &c., together with all other kinds of useful implements of Husbandry, manufactured and kept constantly for sale by John T. Durdning & Co. at their Agricultural Store, also in Grant street. Orders for articles in the above line by mail or otherwise, shall be faithfully and punctually executed.

THOMAS DENNY,

Grant street, 3 doors in the rear of Dinsmore & Kyle's

WATKINS' PATENT WHEAT FANS, HARVEST TOOLS, &c.

THE subscribers, being confident of the superiority of the Watkins' Fan have made arrangements with the Patentee to manufacture the article in this city.

The difficulty of procuring these fans from Washington county in this State, (where they were formerly manufactured) and the high price at which they were sold has much retarded their introduction in our immediate vicinity; they are now manufactured by us at a reduction of about 40 per cent. on original price, and made of warranted materials and by experienced workmen. The Riddles and Screen of this fan are operated upon by a simple crank motion, and the general construction of the fan is such as to give the wind a proper direction and great force on the riddles, thus enabling farmers to clean double the quantity of grain and put it in better order for market than can be done by those in common use. Our assortment of Fans and Harvest Tools are as follows, viz:

Watkins' Patent Fans	\$30.00
do do with unshipping heads	32.00
Common Crank Shake Patent Fans,	25.00
do do do with unship heads	27.00
do Dutch Fans,	20.00
Box Fans; a very complete fan and well suited for small farms,	15.00
Grain Cradles with 4 & 8 fingers and warranted	4.00
Scythes attached,	5.00
do do with wire braces,	2.25
Grass Scythes and Sneaths, in complete order for mowing	—
Grain, Grass and Bramble Scythes,	—
Sickles and Grass Hooks,	—
Scythes Stones, assorted kinds, Ropes for whetting	—
Grain Scythes,	—
Horse and Hand Hay Rakes,	—
Cradlers' Hammers,	—
Hay Forks, of sizes suitable for making and pitching hay,	—
Threshing Machines, &c.	—

Also, Corn and Tobacco Cultivators, Corn Harrows, Field and Garden Hoes, and as usual, a large assortment of IMPLEMENTS AND SEEDS, comprising nearly every variety used by the planter.

ROBERT SINCLAIR, Jr. & Co.

Light street near Pratt street wharf.

june 4

31

DAHLIA ROOTS.

The subscriber can furnish any quantity of DAHLIA ROOTS to the number of one thousand, recommended to be a choice variety, all of the double kind, and from the well known nursery of Samuel Reeves, Esq'r. near Salem, New Jersey. I can also furnish from the same nursery very superior APPLE TREES for spring planting, if orders are given in soon for them. Peach Trees cannot be furnished from the said nursery before next fall.

J. S. EASTMAN.

CONTENTS OF THIS NUMBER.

Queen Anne's county Silk Company—American silk Handkerchiefs—on building stone fences—grazing sheep in corn fields—report of the Columbian Horticultural Society—culture of silk—lime, a preserver of fences and buildings—culture of parsnips—blue grass—value of Durham cattle—ruta baga—great strawberry—geological survey of Maryland—fire blight—culture of tropical plants—to destroy grub worms—making butter—mode of preventing the ravages of insects—the crops—prices current—advertisements.

THE FARMER & GARDENER

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, E. P. ROBERTS AND SAMUEL SANDS—EDITED BY E. P. ROBERTS.

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THIS publication is the successor of the late **AMERICAN FARMER**, and is published at the office, at the N. W. corner of Baltimore and North streets, over the Patriot office, at two DOLLARS AND FIFTY CENTS per annum, if paid within one month from the time of subscribing, or \$3 if after that time. All letters to be post paid.

BALTIMORE: TUESDAY, JULY 3, 1838.

We have received the first number of a new paper published at Burlington, New Jersey, by Messrs. Ward Cheney and Brothers, entitled, *The American Silk Grower*, which, as its name imports, is to be devoted to the Silk Culture. We hail its appearance with feelings of pleasure, believing that it is within the power of its enlightened conductors to render it a most able advocate of this branch of husbandry. The Messrs. Cheney are practical men, largely engaged in the Silk business, and, therefore, will be safe advisers of the public. We most heartily wish them success.

We have received several numbers of the Delaware Register, a monthly periodical established a few months since at Dover, Delaware. It is devoted to the purposes of agriculture, the history of Delaware, and general literature. The numbers we have received are filled with excellent matter, and evince good taste, sound judgment, great industry and a chastened zeal. The reminiscences of the gallant *little State* already published are highly interesting, embracing periods in her history and individuals dear to the bosom of patriotism. The literary as well as agricultural communications are good, and we express but the unfeigned sentiment of our heart, when we wish it may receive a liberal support; nay, that it may receive the *patronage* of every man in Delaware who is able and willing to pay for his subscription; for non-paying patrons are but as abominations in printers' bones.

Dutton Corn.—We have had for several days, a small patch of this excellent variety of corn in tassel.

The hay harvest in this quarter is abundant, and the hay has, thus far, been got in uninjured.

Cultivation of Beets.—Those who have small patches of beets would find it to their interest to use the spade in, and as auxiliary to, their culture. Let the spade be inserted between the rows so as to loosen the earth around the roots without otherwise disturbing of them. It is not meant that the earth should be turned up, but that it should be simply *raised*. Beets thus cultivated will attain an almost incredible size. An acre thus cultivated could be made to yield 5000 bushels.

We have received a copy of the annual catalogue of our old friend Sinclair, of the good things in the way of fruits, shrubs, and flowers, to be found at the *Clairmount Nursery*. The list shows that he keeps pace with the spirit of the age, and offers inducements to purchasers, both in the quality and quantity of his assortments in all the departments appertaining to agriculture and horticulture.

Timothy Meadows.—Last year a friend of our's had one of the best *set* timothy meadows for its age we had then ever seen. It was its *first* cutting, and we are confident it cut upwards of two tons to the acre: this season, however, it is a most sorry substitute for a *timothy* meadow, as in one year the *timothy* has been fairly ejected to make room for more unprofitable occupants—not more than one-fifth of as many spears of the former grass being now standing as were last year. We account for it in this way. Our friend was not content that his meadow should yield him a most luxuriant crop of good hay; but he grazed it in the field until every blade and stump of grass were literally *razed* to the earth; so that between the injury from the hoofs of the cattle and horses, and exposure to the winter, four-fifths of the *timothy* was killed. This fact should be a warning to others.

SURREY FARM.

We notice with regret, that our friend and neighbor, the proprietor of this fine estate, has offered it for sale. Our regret is of a two-fold character: first, that we shall lose a most excellent neighbor, and secondly, that the vicinage will

be deprived of the example of a good farmer.

Having thus spoken of its owner, let us say a word or two of the farm. The soil, originally, was what is generally termed *kind land*; but having been the property for forty or fifty years, of gentlemen whose means were as ample as their agricultural ambition and desire to excel were laudable, it has received the benefits of modern improvement, and is now better than when it was first cleared. Its present owner has, with a liberality worthy of the noble science of agriculture, been generous to his fields, and awarded them abundant supplies of lime and ashes; nor has he been sparing of the products of the barn and the stable, or dealt out with a stinting hand that fine fructifying agent—street dirt. These means, applied with full hands and enlightened heads, aided by judicious courses of cropping, have not only been the means of preserving the land in its pristine vigor, but of pushing its powers of fruitfulness far beyond that point, as is attested by the present abundant crops now growing on the fields of *Surrey*. Of the buildings of this estate it may be said they are all that a gentleman need require: a spacious and elegant mansion, with barns, stables, outhouses and offices to correspond, offer every thing by the way of accommodation that the heart of the most ambitious could desire. As a residence for a gentleman of fortune, few situations around Baltimore combine equal attractions. In looking over the noble edifice that adorns the grounds, and viewing the well arranged fields, now clothed with abundance, one cannot resist wondering how humanity, in its most lofty aspirations, could desire a more lovely home than this. But if it must be our lot to lose the kind offices of so good a neighbor, and to be deprived of the wholesome influence of his well regulated enterprise and skill, we shall console ourselves with the hope that in his contemplated change of position he will more than realize his fondest anticipations.

Do not attempt to feed a great number of worms until you have some knowledge of their habits, derived from experience, otherwise you may not meet with complete success. A few well attended to the first season will do you most good.—*Silk Grower*.

[From the American Silk Grower.]

THE MORUS MULTICAULIS.

Every one in the least acquainted with the means of producing silk well knows that the first matter requiring attention is to provide a plentiful supply of food for the silk-worm. The leaves of the mulberry tree are not the only leaves which the worm will eat, but for aught that is known they are the only food on which the worm will feed and afterward spin silk. There are many varieties of mulberry trees. Those most cultivated by the silk-growers of all countries are the *Morus Alba* or White Mulberry, the *Brussa*, and the *Morus Multicaulis*, commonly called the Chinese Mulberry. We have cultivated all these varieties, and have fully satisfied ourselves which of them is most valuable. No doubt a very handsome profit may be obtained by converting the leaves of the White Mulberry into silk. Experience has abundantly proven that this is the case. The leaf of the *Brussa* is larger than that of the White Mulberry. For this reason we prefer the former to the latter. We, however, give the *Morus Multicaulis* the decided and unequivocal preference over all the other known species of Mulberry trees. Among practical silk-growers we believe there is very little if any difference of opinion on this subject. This tree has now been in our country several years, and the more it becomes known the more it is valued and sought after. We will give a few of the most obvious reasons why we prefer the *Morus Multicaulis* to the White Mulberry. It takes the latter five years at least to grow large enough to afford foliage sufficient to feed many worms. But from the *Morus Multicaulis* of the first year's growth we have fed worms in such numbers as to obtain from 50 to 100 lbs. of silk from the leaves growing on an acre of land worth from \$250 to \$500. It has another advantage of still greater magnitude. The leaf of the *Morus Multicaulis* is 8 times larger than that of the White Mulberry, therefore the labor of gathering it is reduced in the same ratio. This is a very weighty consideration, inasmuch as the picking of the leaves is the great item of expense in making raw silk. The weight of leaves which the *Multicaulis* will produce is a hundred per cent. more than the White Mulberry affords where the trees are of equal age and on the same extent of ground. This is not all. The *Multicaulis* can be propagated more abundantly and cheaper than the *Morus Alba* or any other tree with which we are acquainted. Many persons have expressed fears that the *Morus Multicaulis* would not endure a northern winter. When the tree was first imported and planted in New England, it suffered from the unprecedented cold of some of the late winters—But it has now become acclimated and will live after being protected the first winter of its life. In the middle and southern states we have not heard that it has been injured by the cold weather. We have now growing on our silk plantation in this town many of these trees, which have remained in the open field without the least protection since last summer, and they are now as thrifty and hardy as any of our native forest trees. That the *Morus Multicaulis*, with proper management, will endure the climate of New York and New England, we have abundant evidence. That it will flourish in Pennsylvania and the southern portion

of the union is not here deemed questionable.—Experience has proven it. At the north the tree must be protected the first winter. At the south even this is not necessary.

We do not think it advisable to attempt to propagate the *Morus Multicaulis* from the seed as it is extremely difficult to procure it and hardly possible to distinguish the seed of the genuine Chinese Mulberry from that of the less valuable varieties. Nor should these objections be obviated, is it by any means certain that a tree can be grown from the seed of the *Morus Multicaulis* which will resemble the tree from which that seed was taken. This has been demonstrated by many experiments. Nothing can be gained by attempting to grow the *Multicaulis* from seed, but much may be lost by it. The tree can be produced from layers or cuttings more quickly, cheaper, and certain, than by any other method.

Any land that is suitable for raising a crop of corn will do for cultivating the Chinese Mulberry. A dry warm sandy loam is quite congenial to its nature. A cold, damp, or heavy soil will not answer. It will thrive tolerably well on poor land, but much better on that which is fertile. Prepare the ground as for a crop of corn, and at the same season furrow it into 3½ feet asunder. Then scatter well-rotted manure in the furrows two inches deep. Trim the trees of every limb, and lay them in the furrows so that they will just reach each other, cover them up about as deep as corn is usually planted, except the roots, which should be buried deeper. Carefully preserve all the limbs and plant them in the same way. Ten trees are often thus procured from one. In about three weeks, should the weather prove favorable, sprouts from the buried tree will break through the ground. After which, the earth about them must be stirred occasionally, and the weeds be kept down till August. Then let them entirely alone that they may ripen and the wood attain solidity before the coming of the autumn frosts. When the trees have done growing in the fall, pull or plough them up and cut them apart with a knife or pair of pruning shears. To preserve them through the winter, lay them down in the open field on dry ground—cover them with sand and they will be found fresh and in good order the next spring—Or they may be placed in a cellar with the roots resting on the ground with some dry earth placed about them.

If your object is to grow more trees you will, the ensuing spring, again plant according to the directions already given. But if you purpose to make a permanent plantation, you will, after ploughing the ground, set out the trees in rows 8 feet apart, and standing 2 feet from each other in the rows. When winter again draws near, cut off the trees near the ground and preserve the trunk and limbs for further increase. When spring returns the roots and stumps which were left in the ground will send up a great number of shoots, which will put forth a quantity of foliage that will be truly astonishing. By severing the tree near the earth several advantages are derived. The body and branches are thereby saved to be again planted. The tree is so valuable that this is an important consideration. The quantity of leaves which will grow on the sprouts is greater than could have been obtained from the whole tree

had it been left standing. Leaves cannot be gathered from trees of much height without reaching or climbing up to them. But they may be plucked from shoots of one year's growth without any such extra exertion, and by children. This practice also comforts the croaker about "too cold a climate for the *Morus Multicaulis*," and places the silk business beyond the possibility of harm from the severity of northern winters.

There are other methods of cultivating the Chinese Mulberry, approved by gentlemen of intelligence, which we have tried, but we have been so much more successful when we have adhered to the course we now recommend that we shall speak of no other.

Large sums of money have been made by the cultivation and sale of our favorite tree. It has proved an exceedingly lucrative employment to those who have engaged in it. But we would advise that more than this should be aimed at by those who intend to embark in this new, and, as we think, important enterprise, viz. To make money by growing silk. This can be done, and our country become one of the greatest silk-producing regions on the globe, should our people but will to have it so. No competition in the business need be feared for a number of years to come, if ever. The bounty offered on silk by the state of New-Jersey will pay all the expense of making it, and leave the whole of the crop a clear profit. The bounty granted by Pennsylvania will do even more. Then why not advance in this great enterprise. Why remain idle when such weighty considerations invite to action. It is one of the most pleasant employments that ever were conducted under the sun. The lame, the halt, the widow and the orphan can perform the labor. Then why not permit them to do so and pay them a part of twenty millions, which is annually sent abroad in exchange for silks, and to feed foreign mouths, and enrich foreign aristocrats. This would afford thousands of the poor and feeble among us the means of comfort and independence, and make their hearts beat with pleasant emotion, and their eyes sparkle with gladness and joy, and at the same time add to the wealth, the honor, and the prosperity of our great country.

The publishers of this papers, in connection with Jedediah Strong, Esq. are now feeding more than half a million Silk Worms on the plantation of Mr. Repka, two miles above Dyott's glass-works, on the Point road, near Philadelphia. Mr. Strong is a gentleman whose experience in the management of the Silk-worm is great, and the raw silk produced under his direction has never been surpassed in this country. The plantation is managed by Mr. Ter Hoeven, and visitors to the establishment may depend upon being received courteously, and every information relative to the business will be cheerfully given. Those persons who feel an interest in the cause, or who wish to have their curiosity gratified, are respectfully solicited to visit the establishment. Those wishing a few Worms can be supplied at one dollar a thousand, by applying to Jedediah Strong, or J. Ter Hoeven, on the premises.—ib.

Arrogance is a weed that grows mostly on dunghills.

[From the Cultivator.]

MINERAL MANURES.

Although there is much to please and interest the mind in practical farming, yet devoid and apart from the theory, it is little else than a routine, suited to the capacity and ambition of uncultivated minds. An active and enlightened mind seeks to understand the cause and effect—to apply the sciences; in short, it is restive, until the queries embraced in agriculture, are disposed of and determined upon sound philosophical principles. 'Tis this constitutes theory! and 'tis this theory, that unfolds a world of beauties to the scientific agriculturist, of which the mere prejudiced practical farmer, the mere tyro and novice, must remain ignorant, and that too, of the highest branch of the profession which he follows.

The improvement which has been effected within the last twenty years in several of the eastern counties of Pennsylvania, (and especially in Chester,) is almost incredible. And the whole is mainly attributed to a regular and judicious use of lime as a manure. To me, it has been matter of astonishment, to find this inestimable restorative meet with so little favor in the minds of the conductor and correspondents of the Cultivator. My farm is situated in a district of secondary formation, and the soil is principally calcareous, yet I have seen the most surprising beneficial effects attending the free use of lime and plaster; the latter apparently reacting on the former, and consequently, the greatest benefit is derived by using them together. The crops, not only on my own farm, but on others in this vicinity, have been doubled by a free use of mineral manures. When a farm has been improved so as to produce heavy crops, there will be such a corresponding increase in the quantity of stable manure as to insure its future fertility. I look upon the immense beds of limestone in this region as an inexhaustible store, designed by the wise Governor of the World to keep up the strength of the land, in all time to come. I regard the limestone of Pennsylvania as a mineral, which will confer more real benefit on posterity than any of her other mineral treasures. The aid which it promises to contribute to the support and improvement of her agriculture cannot be easily overrated. Some idea may be formed of the estimation in which lime is held here as a manure, by the fact, that farmers come from 25 to 30 miles, i. e. from Maryland and the poor district of primitive formation in the southern part of Chester county, bordering on the Maryland line, to my limekiln and others in the neighborhood; the lime costing those farmers 25 cents per bushel when delivered. To the farmers in that quarter, lime is the "anchor of hope;" there it has already made the barren and desert place glad, and is fast putting a new and improved face upon the country. The farmers, even there, with this far fetched means of improving their land, prefer bettering their condition by liming near a good market, rather than migrate to the exuberant soil, and realize the utopian dreams and fairy tales of the "far west."

On part of my farm, 300 bushels of lime per acre have been applied within 30 years, at the rate of about 100 bushels per acre at a dressing, and always put on fresh, and slaked, then immediately spread. I am not inclined to believe that lime should become carbonated before it is appli-

ed. I adopt Sir Humphrey Davy for my prototype, in every case involving agricultural chemistry. I shall be encouraged so to do, until some modern wiseacre can clearly demonstrate that Sir H. is wrong. Doubtful points in Davy's theory, have become demonstrable truths with me, after being aided and enlightened by the lamp of experience. Lime, in its fresh caustic state only, while an alkali, acts as a decomposing agent in the soil; rendering vegetable substances soluble—but when a mild carbonate, it operates only like marl, in improving the texture of the soil, according to Davy, whose authority is unquestionable, and the theory, at all events, may fairly challenge contradiction; hence the advantage of applying lime, like stable manure, in a fresh state.

With regard to the theory, or the manner, in which gypsum operates on vegetation, an accidental circumstance which occurred in my practice or under my own eye, goes further to establish the truth in my mind, than all the ink which has been spilled on the subject; even the adopted theory of Prof. Low and British Husbandry to the contrary notwithstanding. In April, 1832, I sowed half a bushel of plaster on a small piece of land in the middle of a wheat field, for experiment, in order to ascertain whether the plaster would have the slightest effect, even of changing the color of the wheat. The result answered my expectations; there was not a shade of change in the color of the wheat in the future stages of its growth. In autumn following, the same field was again ploughed for wheat, and the plaster of course turned down, the field was deeply ploughed, say 7 or 8 inches—the spring following, the field was sown with clover seed; the secret then was speedily developed; when the wheat was cut in harvest the growth of clover on that same land which had been sown with plaster, was so luxuriant as to interfere with the cradle in cutting the wheat. —Soon after harvest, the clover on the said land flowered, and a heavy swath might have been mown on it in September following. The adjacent parts of the field, with the same soil and culture, exhibited a sickly contrast. In the autumn of 1833, the clover on said land was trodden down by stock, returning manure to the soil, and by that means the plaster indirectly prepared the ground for a sure crop of wheat. This one single and simple fact serves to overthrow the theory that plaster must be sown on the plants, to be absorbed through the pores of the leaves—attract moisture from the atmosphere, &c. This mooted point I consider settled, and the soil and roots made the laboratory instead of the leaves and the atmosphere.

Although my agricultural career has been only short, yet the great object, improvement, has been ardently and zealously pursued—sufficiently, indeed, to create a most utter and implacable abhorrence against all vague and unfounded theory, which is the bane of the agricultural press. The mere conjecture of a writer, if in error, will do no harm; but 'tis the positive declaratory assertions, where wrong, that do mischief, inasmuch as many believe and adopt what they read.

Quere. Why is it that lime and plaster act much more efficiently when both are applied to the soil, since the base of both is lime?

W.M. PENN KINSER.

Pequea, Lan. Co., Pa., April 15, 1838.

From the Yankee Farmer.

MOWING.

This is one of the most important operations in farming; a great deal of this work is to be done in a short time, and in a warm season, and it is of the greatest importance to lighten the labor as far as possible. We have seen some very stout hardy men toil and sweat all day, and do but a small day's work, while other men of much less strength would cut more grass, and yet not exert themselves to fatigue. From this it is evident that some mowers exert twice the strength that others do in performing the same work, and those who use the least strength usually do their work the best, though they may not render the field so smooth by cutting off the tops of knolls, stumps, stones, and other impediments that intrude themselves among the thick grass.

There are several reasons why there is so great a difference in the expense of labor; there is a difference in sneads and scythes as to their hanging well, and there is so great a difference in scythes as to their cutting with ease and holding their edge, that some are better worth five dollars than others are worth one cent. Some men keep their scythes in prime order, and in mowing they lay their strength out to the best advantage; they use a gentle motion that will not fatigue; they are less liable to strike stones, &c. than those who make exertions, and when they do strike them, less injury is done.

The best scythes should be chosen, as the difference in price between a very good one and one that is good for nothing, is a mere trifle; indeed the expense of a good scythe is less than its value above a poor one for only one day's use. A scythe should hang light and easy, so that in mowing no exertions will be necessary excepting to swing the scythe and hold it steady. We have seen some scythes and sneads, or things that had these names, so rigged that the strength of one man was necessary to hold them in a proper position, while that of another was needed to swing them; of course, by having a good scythe well hung, one half of the labor will be saved.

With good rigging and a good scythe kept sharp, a gentle swing of the scythe will be sufficient to do as much as is performed by those who get along by main strength instead of wise management. The motion of the scythe on even ground should be horizontal, by *pointing in and pointing out*, as the saying is, cutting the grass square at each side of the swath. Some mowers who labor hard, waste half of their strength, and do bad work, strike in over the tops of the grass, cutting it off lower and lower as the scythe approaches the middle of the swath, then rising as it goes to the other side; so that the middle of the swath for only about one-third of the width is cut sufficiently low. This is called the *square lop*, and it often brings the scythe in collision with obstructions in the middle of the swath, while one fourth or more of the grass is left on each side. At a mowing match, an old gentleman was showing his sleight at taking the *square lop*, when his scythe by some unaccommodating substance in the grass, was made into the shape of a rainbow.

Those men who labor to great disadvantage in mowing should get some that are well skilled in the business to select and hang their scythes, and

give them lessons in their work. We think this would be good economy. With a little trouble they could improve so as to perform more labour and save ten or twelve dollars' worth of strength in one season; this item saved annually will be very important to one who wishes to make a stout old man.'

EFFICACY OF LIGHTNING RODS, OR CONDUCTORS.

BY F. MACERONI.

I perceive that a question is mooted at the meeting of the British Association for the Advancement of Science, whether in the case of a certain "monument 140 feet high, erected on the summit of a mountain 1,400 feet high, augmented safety, or danger, would be the consequence of attaching to it a conductor or paratonnere?" I am induced to call the attention of your intellectual readers to this passage, as I am very sure that the subject is of great importance to society.—About six months ago (vol. xxvi. p. 367) you honoured me by giving insertion to my account of a safety gunpowder magazine, in which I speak of lightning conductors, and to which I would request your readers to refer. There is just now a gentleman, one Lieutenant Green, of the Royal Navy, who is endeavouring to convince the public by his writing, that conductors are prone to cause the damage they are intended to avert. I must say, that I regard this statement as a mischief, for I have seen too much of the saving power of conductors not to wish that every house in Great Britain were protected by one.

Lieut. Green, in his anti-paratonnere pamphlet, lately published by Tanner, of New Bond street, tells us of fifty churches in this country having been lately struck by lightning, because they had metal vanes! To be sure;—but metal vanes are not conductors; and conductors should not be formed of a wire scarcely bigger than a bell wire. In my above quoted article, I have stated, that a tube is better for a conductor than a solid rod, because it is to the surface of bodies that electricity adheres. Nothing could be fitter for the purpose than iron gas pipes; but their connexions and attachments, down the building, must be of stone, or other non-conducting materials.

Previously to the church of St. Peter's, at Rome, being protected by numerous conductors, by the French government, damage was continually being done to the upper part of that stupendous edifice; but never was the least injury inflicted after the application.

It must be borne in mind, that an elevated and efficient conductor will give its protection more frequently in perfect silence, and unobserved, than by conducting into the ground, or water, a positive discharge of electric matter, accompanied by a flash and thunder. The many-pointed conductors will silently draw off the electricity from a passing cloud, without any discharge, properly so called, so that the blow has been parried, if it be not a *bull* to say so, before it is struck.

During my several sojourns at Rome, I have made particular inquiries into the effects of lightning on St. Peter's church. After the numerous substantial, many-pointed conductors were affixed to the summit, and most prominent angles, of the church, by the French in 1808, an electric dis-

charge was not known to have fallen upon it more than three times, and then it did no injury. It appears that the clouds, in passing over the church, are deprived of their plus electricity by the conductors, just as a Leyden jar is silently equilibrated by the presentation of a metallic, pointed conductor. How many ships would be saved from damage, conflagration, and, perhaps, instant submersion, by properly constructed vehicles for conveying the electric fluid over the sides into the water? What inconvenience could be felt, from a branched rod and a chain from the mast-head, hanging along the shrouds into the water? All the failures of conductors arise from their want of sufficient mass of metal. A zinc chain, or tube, would be far less liable to oxidation than iron; and, as I have before remarked in the case of a powder magazine, &c., the metal might easily be kept with a clear surface, by an occasional rubbing with a brick-bat. About London we see conductors not thicker than a quill, applied to shot towers, tall chimnies, &c. whereas they ought to be gas tubes of at least an inch in diameter. The top ought to be formed in the manner of a branch of a tree, with five or six points of copper gilt, the extreme points being of pure gold or silver, as are those at Rome.

In some volcanic districts, over which it would appear that the solidified crust of our globe, which covers the yet incandescent mass, is thinner or more porous, than at other points, the electrical exchange of compliments between the earth and atmosphere, are almost as frequently directed upwards from the earth to the clouds, as in the contrary direction. Even against such upward discharges, the conductors, inserted in the earth, and ascending to the summit of the building, will preserve them from injury. I have witnessed a great many instances of ascending streams of electricity, some of which I have remarked upon in your pages, particularly in Nos. 401 and 402; and I am induced to think that we should see many more exhibitions of the process, were it not for the trees which act as silent conductors, both upwards and downwards. Electricity is the real food of plants, which they absorb through the innumerable points of their leaves and branches.—On the same principle should a lightning-conductor be constructed with as many points as convenient.

Lieutenant Green says, "seventy-nine churches in Great Britain have in a few years been struck; some of them destroyed; many, after being furnished with from one to four conductors. All of those struck had metal vanes." How "many," out of the seventy-nine churches, were furnished with conductors, this opponent to Benjamin Franklin, does not tell us. He only shows the danger of metal vanes inviting the lightning, without a conductor to take it away. A bit of wire attached to the walls by iron eye bolts, or staples, is certainly more likely to cause mischief than to give protection. A proper and elevated conductor will generally carry off the electricity silently, without any apparent discharge.*

Lond. Mech. Mag.

* *Note.* The above article is inserted because the fact stated respecting St. Peter's Church is deemed important; it otherwise assumes as facts what requires to be verified.—*Ed. Frank. Inst.*

SOILS.

Loams are the most desirable of all soils to occupy. They are friable; can in general be cultivated at almost any season of the year; are ploughed with greater facility and less strength than clay; bear better the vicissitudes of the season; and seldom require any change in the rotation adopted. Above all, they are particularly well adapted for the convertible husbandry; for they can be altered not only without injury but generally with benefit, from grass to tillage, and from tillage to grass. They should not, however, be kept in tillage too long, nor while they are in cultivation, should two crops be taken in succession.

Loams are of four sorts; 1, Sandy; 2, Gravelly; 3, Clayey; and, 4, Peaty.

1. A sandy soil and a sandy loam, are easily distinguished. A sandy soil is always loose and crumbling, and never gets into a clod, even in the driest weather; whereas a sandy loam, owing to the clay that is mixed with it, retains a degree of adhesion or cloddiness, after wetness or drought, and will not suddenly crumble down with the application of machinery for that purpose.

A mellow, rich, crumbling sandy loam, adhesive enough to fear no drought, and friable enough to strain off superfluous moisture, if incumbent on a sound sub-soil, is the most profitable of all soils, being managed with much less expense than any other soil, and raising with advantage, every species of crop that the climate will admit of.

2. Gravelly loams when warm, sound and dry, or free from springs, are useful soils, more especially in wet seasons and climates.

3. A clayey or still loam, is nearly allied to brick earth. Though the soil might have originally been poor, cold, and hungry, yet if it be well drained, according to the Essex system, and highly manured, it will yield great crops. It is found well adapted for the dairy in Cheshire.

4. Peat, in some of its varieties, may likewise be converted by culture, into a species of black soft loam, and in that state, it becomes highly fertile and productive.

Loams will produce hemp and flax, in the greatest perfection and abundance, besides the other crops usually cultivated in this country; and in rich loams, where the substance is both dry and open, lucerne might be more generally grown than it is, in preference to other grasses.

Before the subject of soils is dismissed, there are some miscellaneous particulars which merit attention; 1. The means of ascertaining their composition; 2. The nature of mould so essential for their fertility; 3. Their colour; 4. The importance of cultivating good soil; and, 5. The general principles on which their improvement may be effected.

1. That the most efficient methods for improving soils may be adopted, it is necessary that their composition should be known. A distinguished philosopher has suggested a plan for that purpose, which can easily be carried into effect, by any person at all conversant in chemical researches. But the generality of farmers have not the means of entering into such researches; yet they are able, by observation and experience, to discover the most important deficiencies of the soil they cultivate. This may be effected, by comparing their own soils with each other, and with the most fertile in their immediate neighbor-

hood. The great object they ought to keep in view is, to render a soil capable of receiving and retaining such a due quantity of moisture, as may be sufficient to nourish the vegetables that grow in it, and to absorb or to throw off, that superfluous water which would prove injurious.

2. Mould, which contains a mixture of animal and vegetable remains, particularly from putrefaction, is an essential ingredient in all fertile soils. It arises from the decomposition of the roots and leaves of vegetables on grass-land, and the stubble and roots of grain crops, on arable. This process on grass lands is very slow; for it is calculated that it proceeds at the rate of only one inch in a century. Considerable accumulations of this mould, are likewise produced from the leaves of trees, amassed for a number of years, and rotted on the surface. When in addition to vegetable, there are animal remains, in a state of decomposition, the soil is distinguished for its fertility.

3. It is of essential consequence, when the surface is bare and exposed to the rays of the sun, that the color of the soil should be such, as to attract and absorb the greatest heat from the sun and the atmosphere, more especially in spring.

Soils are of various colors; the principal are white, black and red.

White stiff clays are heated with difficulty, and being usually very moist, they retain their heat only for a short time.

A black soil, containing much vegetable matter is most easily heated by the sun and air. Its temperature has increased from 65 to 88 by exposure to sunshine for an hour. A chalky soil, under the same circumstances, was heated only to 69 degrees. In the shade, however, the black mould lost its heat more rapidly.

The red color in soils, is owing to iron in various combination. That which approaches nearest to the metallic state, is considered by some the most favorable.

4. It has been justly remarked, that too much can hardly be paid for a good soil, and that even a low rent will not make a poor one profitable. The labor of cultivating a rich and a poor soil, is nearly the same; while the latter requires more manure, and consequently is more expensive. Poor soils, at the same time, may have such a command of lasting manures, or even of temporary sorts, like sea weed, as may render them profitable to cultivate.

5. There are various modes of improving soils.

Soils with acids or salts of iron, may be ameliorated by the application of lime or chalk. The sulphate of iron is thus converted into a manure.

If there be an excess of calcareous matter in the soil, as in chalky soils, it may be improved by the application of sand, or clay, or earthy substances.

Soils too abundant in sand, are benefitted by the use of clay, or marl, or vegetable matter.

A deficiency of vegetable or animal matter must be supplied by manure.

An excess of vegetable matter is to be removed by burning, or to be remedied by the application of earthy materials. The substances necessary for improving soils, are seldom far distant. Coarse sand is often found immediately upon chalk, and perhaps always under it, while beds of sand and gravel are commonly below clay, and clay and marl generally below sand.

The labor and expense of improving the texture or constitution of the soil, it has been justly observed, are amply repaid by the great permanent advantages they produce. Less manure is afterwards required, the future fertility of the soil is ensured, and capital, thus expended, secures forever the productiveness, and consequently the value of the land.—*New Eng. Farmer.*

From the Nashville Republican and Whig.

COMMERCIAL & PLANTING INTEREST.

From the best and most authentic information that can be obtained it seems that the prospect of the Tobacco crop this season, promises little better than that of the last, which is known to have been considerably short of the average quantity. Should this be generally the case, the article must not only keep up, but get to higher prices than it has commanded for some time. Both our staples of this country are likely thus to fall short, while crops of grain and other productions will probably be as good, both in quantity and quality as of other years.

We publish the following extracts from various parts of the Tobacco growing sections of country, all of recent date.

Burksville, Cumberland co. Ky. June 5, 1838.

The prospects for the growing tobacco crop in this section of the country are very unpromising, on account of the scarcity of plants, owing to the unusual cold spring—and the destruction of the early plant beds. From the reports that reached us from the adjoining counties we are led to believe that the prospects for the tobacco crop are not better there than in this section.

We do not believe that there will be more tobacco raised in Cumberland and the adjoining counties than last season, if as much.

Defeated Creek, Smith co. Ten. June 8, 1838.

In our section of the country comparatively but little Tobacco will be made. We never knew plants so scarce, nor did we ever experience such an unfavorable spring for the culture of Tobacco, we fear the crop will not be larger than last season.

Carthage, Smith co. June 8, 1838.

We have taken pains in enquiring into the prospect of the present growing crop of Tobacco, and have no hesitation in saying that we believe it will fall short of last year's supply.

Dixon's Springs, Smith co. Ten.

In our neighborhood, which is a very considerable tobacco growing district, the crop will, we believe, be a very small one. The scarcity of plants is such, that much of the ground that was intended for tobacco has been planted in corn. From all sections of the country so far as we have heard, the accounts are about the same.

Rome, Smith county, June 11, 1838.

In our section of the country the farmers complain much of the want of plants; very few crops are pitched, and should the fall not be late but little tobacco will be raised. Under the most favorable circumstances the crop will turn out a short one.

Goose Creek, Smith co. Ten. June 12, 1838.

On Goose creek there will be rather more Tobacco raised than last season, but not more than a third of a usual crop.

Hartsville, Sumner co. June 12, 1838.

The unfavorable spring has cut the prospect for crops of tobacco short. The planters in our county complain much of the want of plants, and many have planted their ground, set aside for Tobacco, in corn. It is the general belief that there will not be as much tobacco raised as last year, which was little enough compared with previous seasons. From the best information that we can get the present year's crop will fall short of last year's crop.

Gallatin, Sumner co. Ten.

From the best information we have been able to get there will be almost a total failure in this spring tobacco plants—and the crop must be very short.

GEOLOGICAL SURVEY OF MARYLAND,

By PROFESSOR DUCATEL.

(CONTINUED.)

Sec. V.—Mineral Resources of Montgomery county.

It has already been stated that the principal mineral resource of the county lies in a region of country east of the Seneca, in which the prevailing rock is the *serpentine*—a rock easily recognised, as it usually presents some shade of green, sometimes of a uniform color, but more frequently the different shades and colors are disposed in stripes or veins, so that when polished it bears some resemblance to the skin of a serpent; whence its name. This rock is very frequently found to form the gangue, or matrix, of an ore of known and increasing value, usually designated as the *chrome ore*. The occurrence of the ore in this region was announced by me a few years back, which led to its extraction in several localities, under circumstances not well calculated, however, to subserve the interests either of its original proprietor or of the public. Contracts were entered into without a proper knowledge, on the part of owners of the lands, of the value of the material which they contained; and exclusive privileges were granted to make researches and excavations, under terms that, besides securing nearly all the benefits to one only of the contracting parties, prevented a full development of the resource to the county. It is much to be regretted that I was not consulted, in my official capacity, in the passage of these contracts; and that the requirement of the act authorizing the survey should have rendered it impossible for me to make a more minute examination of the county, at an earlier period. I did, however, what my duties to the public required at the time; namely, to point out the direction in which minerals of value might be expected to occur. On the other hand, it has been gratifying to find that these contracts embrace only some of the localities where the ore has been discovered; and that large bodies of it remain, of even a superior quality, whence the demands of our industry and of our commerce can be supplied with a more equable distribution of the profits arising out of them.

But there are other matters to be attended to, in order to secure to the county the entire fruition of this resource; and these are: 1st. To become well acquainted with the ore itself—2dly. To determine the quantity of that constituent of the

ore which alone gives it value; and 3dly. To adopt some judicious mode of extracting it.

Now, although it would seem only necessary to have a few opportunities of comparing specimens together to enable one to recognise the ore, and to discriminate a good from an indifferent one; yet, from the numerous mistakes that are made, even by those who pretend to a familiar acquaintance with it, it appears that more than an ordinary attention, or perhaps some natural aptness, is required, to enable one to seize readily those distinctive characters, by which to an accustomed eye it is recognized from all other substances. An experienced Mineralogist will rarely be at a loss, because the external characters of the ore are well marked; yet it is exceedingly difficult, if not impossible, to furnish such a description of them as would enable one who is not a Mineralogist to distinguish this from many other mineral species. Upon the whole, then, it seems that the best advice to be given to those who are interested in possessing a knowledge of this ore, is that they endeavor to familiarize themselves with its appearance by a frequent examination and comparison of specimens known to be of good quality; and, above all, to learn to discriminate the ore itself from the rock in which it is imbedded. To determine the quantity of that constituent, contained in the ore, which alone gives it value, requires some knowledge of chemical analysis; but those who have only a slight acquaintance with chemistry will readily understand and may avail themselves of the following simple process: A given quantity of the ore is to be first reduced to as fine a powder as possible, and then fused, in a silver crucible, with three times its weight of caustic potassa and salt-petre. The fused mass, which is a chromate of potassa, is then to be digested in water, until every thing soluble is taken up. The alkali being now saturated with acetic acid, the chromic acid is precipitated with a solution of acetate of lead. The precipitate, which is of a beautiful yellow color, is washed, dried, and ignited under low redness. It is a *chromate of lead*, (one of the most valuable products of the ore,) every 20.5 grs. of which contain 6.5 parts of chromic acid, or 5 of oxide of chromium, being the condition in which the metal is in the ore. To ascertain the other constituents of the ore, would of course require a more elaborate process, but this is not necessary to determine its commercial value.

As to the mode of extracting the ore, one of the methods hitherto pursued in Montgomery county proceeds upon a totally mistaken idea; namely, that what is termed the *surface ore* has been originally deposited in detached pieces, on or a little below, the surface of the ground. The formation of the ore is probably contemporaneous with that of the rock in which it occurs in veins, or rather *beds*. These veins frequently reach to the surface and penetrate to unknown depths. When they reach the surface, the rocks which contain them become disintegrated; fall to pieces, and cause the destruction of the vein of ore itself, the fragments of which are scattered about the vicinity. They are indications of the proximity of a vein, that can only be reached, however, by penetrating to the solid rock. The hope of finding any great amount of ore, under such circumstances, will, nine times out of ten, be disappointed.

When the vein has been reached, it is necessary to put a blast into it, and pursue it according to the appearances that may present themselves, but to predict confidently what will be the ultimate yield of the vein can in no instance be done; although there are more or less favorable signs: such as the size of the vein, which if large indicates generally corresponding extent; and the compactness of the ore, or rather its freeness from admixture with the surrounding rock, for when disseminated through the rock it is seldom worth extracting. On the other hand, as it has just been said, that ore occurs rather in beds than in veins, one should not be discouraged from continuing his operations at any spot, because the ore may suddenly give out; for it has been found that under such circumstances it frequently reappears in another bed at no great distance, and this may commonly be expected when the ore from being in a massive state abruptly becomes disseminated through its matrix. It is always advisable in such cases to push on the exploration to some additional depth.

In selecting the ore for the market, care must be had to separate it carefully from its matrix, and other stoney bodies with which it may be associated, and these of course diminish its commercial value. Should any difficulties arise between the proprietors and purchaser as to the quality of the ore, it should be subjected to the unquestionable test of chemical analysis. The cupidity of some dealers will often prompt them to undervalue an article presented to them for sale, and from the same motive they solicit contracts, always for a trifling consideration, for the exclusive privilege of mining, where they have no intention of using it; as the sole object is to keep out of the market that of which they would endeavor to monopolize the sale, not only to the great injury of individuals, but of infinite damage to the public interests. The only fair engagements of this sort that can be entered into would seem to be, grant the privilege of digging for ore, at certain spots, and for limited periods, in consideration of a stipulated sum per ton of ore, which in reference to that under consideration ought to be from five to ten dollars according to the quality; the undertaker, being at all the expenses of mining. It is to be hoped that hereafter, the officer entrusted with an investigation of the mineral resources of the State, whose duty it is to dispense his services impartially to all parties, will be consulted with that freedom to which his official relations to the public entitle every one of his fellow-citizens.

That there is a great abundance of *Chrome Iron ore* in Montgomery county there can be no doubt. Within the period of the commencement of the Geological Survey of the State, one of the first fruits of which was to signalize its probable occurrence where it has since been found, hundreds of tons have been extracted, and it is impossible to estimate the quantity that remains to be brought to light. A large body of it lies about the head waters of the Seneca, and in one locality on the estate of Col. Lyde Griffith, a thick vein was observed protruding above the ground, from which several tons of the ore have since been extracted. Several analyses of this ore had shown that it contains from 35 to 40 per cent. of oxide of chromium; but as those interested in its purchase,

comparing it with other richer ores, were unwilling to assign to it what I conceived to be its real value, and to remove all room for cavil, I engaged Mr. David Stewart, an experienced and well known chemist of Baltimore, to furnish me with the result of a qualitative and quantitative analysis of a specimen of the ore. I state the result as reported to me by Mr. Stewart, who informs me that he operated upon 30 grains, obtaining the *first* column below, the numbers of which being multiplied by 5 and converting the oxide of chromium into chromic acid gives the *second* column, whilst the *third* is produced by multiplying by 5, converting the oxide of iron into the protoxide, and calling the oxide of chromium chromic acid.

<i>Analysis of Chrome Iron-ore from Montgomery county, by Mr. David Stewart.</i>			
Oxide of chromium	7.	Chromic acid	45.5
Peroxide of iron	9.	Peroxide of iron	40.5
Alumina	1.5	Alumina	7.5
Silica	0.5	Silica	2.5
Magnesia	a trace	Magnesia	0.0
Undecomposed ore	10.	Undecomposed ore	0.0
			96.
			100.5
			28.

I subjoin the analysis by Mr. Seybert of the Chester Co. Pa. ore, which is considered the best, and that of the vicinity of Baltimore, by Beudant.

Analysis of Chrome Iron ore from Chester, by Seybert.

Oxide of chromium,	51.562
Peroxide of iron,	35.140
Alumina,	9.723
Ox. of magnesia,	trace.
Silica,	2.000
	98.425

Analysis of Chrome Iron ore from Baltimore, by Beudant.

Oxide of chromium,	39.514
Peroxide of iron,	36.004
Alumina,	13.002
-	"
Silica	10.596
	99.116

From the best information that has been obtained, the Chester Co. ore readily commands *forty dollars* per ton in Baltimore, so that by comparing that of Montgomery Co. with it, the latter is certainly worth from *twenty-five to thirty dollars*.

The Chrome-Iron-ore has been raised out of several other spots, and indications of it present themselves in many others, but in most places they are liable to contracts, which remaining in

abeyance, will retard for a long time the full development of this great mineral wealth to the county, and thus operate prejudicially to the public interest. I know of no rule, however, by which to impeach the validity of these contracts, and as they are in the possession of those who are fully aware of the value of the ore, it will probably be to their interest to fulfil them in due course of time. In some places where the contracts have been cancelled; and where shafts had been sunk, the intention was, upon a cessation of operations, to fill up the shafts, but it is not deemed advisable to do so, as there is no good reason to suppose that the ore has as yet been exhausted in any locality.

The other mineral resources of Montgomery Co. are of less importance.

In the upper portions of the secondary ridge of hills, known as the Pines, where the chrome-iron-ore also occurs, there are indications of beds of *Iron-ore*. On the farms of Mr. Dickinson, Mr. Otho Magruder, and Mr. Robinson, numerous masses of the brown *Hematite* are seen imbedded in a red clayey soil, containing likewise blocks of a quartz-rock, with cavities that are filled with druse crystals of hyaline quartz, calcedony and other forms of this silicious mineral. The *Sulphuret of Iron* occurs frequently, especially in the talcose slates and argillites of Parr's ridge, but no where in sufficient abundance to render it an object of interest in an economical respect. The *Black oxide of Manganese* has been raised in the vicinity of Brookeville, but does not appear to exist in any abundance. Indications of *Copper* are found in the neighborhood of Barnsville; and at the distance of about $2\frac{1}{2}$ miles from Poolsville in a S. W. direction, excavations have been made remotely in search of this metal. I have advised the proprietor of the land to re-open the shafts, with a view to a better inspection of what appears to be no unfavorable indication of a vein of copper-ore. The shaft which was sunk, also a some remote period, at what is called the *Mush Pot*, on the road between Rockville and Darnestown, was doubtless likewise in search of copper, and not of silver as generally believed, but the indication are very feeble. A specimen of *Galena* was presented to me, said to have been found, on the farm of Mr. Nathan Cook; among the loose rocks on the slope of a hill. I had no success in tracing it to its actual source, nor were any other pieces found, but directions were left to conduct further researches. Ledges of a fine grained yellow *Quartzite* occur in the vicinity of Unity and near Mr. Joseph Bond's Mill, that yield excellent whetstones.

Among the mineral resources of the county, must also be enumerated the well known quarries of beautiful *Freestone*, near the mouth of Seneca, on the estate of Mr. Archibald Lee, which the facilities of transportation by the Chesapeake and Ohio Canal render so extensively available. *Soapstone* of good quality occurs in several places. On the road between Rockville and Georgetown, 7 miles from the latter, Mr. Robert Y. Brent is about to open a quarry and to erect suitable buildings and arrangements for cutting and trimming it. Mr. Joseph Bond, near Snell's Bridge, has a similar intention; and some use has already been made of the Soapstone occurring in the vicinity of Mr. Andrew Clopper's Mill, on the Seneca.

Before concluding the account of the mineral resources of this county, I will call the attention of the people as I have already done that of the inhabitants of the upper parts of Cecil Co. to the use which is made in some sections of our country, of the several varieties of *Talcs*, as well as *Soapstones*, that are now ground into an impalpable powder with whale oil, and largely distributed under the name of *Stone Paints*. *Talcs* well suited for this purpose occur on the road between Darnestown and Rockville, about six miles from the latter place.

TO MEASURE HAY IN THE STACK.

When hay is sold by the stack, or where farmers wish to know the quantity they may have on hand, measurement, instead of the tedious process of weighing, may be conveniently practiced. The first object, is to ascertain the number of cubic yards contained in the stack. As the practice of building them round or circular, is by far the most common, it is necessary in ascertaining the contents of such, to measure round them at different heights but at *regular* distances, (omitting the part above the eaves, if it is a regular cone, as is usual) and these measurements added together and divided by their joint number will give the mean circumference. The square of this is then to be multiplied by the decimal .0796; the product thus obtained is again to be multiplied by the height up to the eave with one third of the rise from the eaves to the peak, and this last product will be the number of cubic feet in the stack. Divide this by 27 and it will give the cubic yards. The measurement round, may be performed by a cord, drawing it close to the stack, and allowing about six inches in depth for loose hay. The height may be known with sufficient accuracy by placing a pole perpendicularly beside the stack, standing off a few rods, and observing with the eye.

If the stack is square or oblong, multiply the medium length by the medium breadth, and that product by the medium height, (which is the height to the eaves and one third of the rise of the roof taken together,) and the last product will be the solid content.

If the hay has been put up in moist a condition as admits of safety, and has stood six months in the stack, ten cubic yards will make a ton. If it has been put up very dry, twelve will be required, if chiefly clover, even as many as thirteen. If the stack is very large, and has been put up quite moist so as to need copious salting, eight or nine cubic yards will make a ton. According to the experience of the writer, the difference between the most moist and the most dry, at the time of stacking, is after settling about as eight to twelve. These circumstances, are then all to be taken into consideration. But notwithstanding this variation, the method of measuring is far more accurate than that of guessing the quantity. J. J. T.

Genesee Farmer.

REFELLING OF INSECTS—Taking the earth away from the roots of trees, and returning back earth mixed with a small quantity of sulphur, will keep insects from ascending the trees. Other repellants of insects may answer the purpose for one spring—such as quicklime, fine salt, old urine, strong soap-suds, a strong decoction of tobacco, onions, &c.—*Farmer's Assistant.*

HORTICULTURAL SOCIETY OF MD. June 9.

Was exhibited this day:

Mrs. Law—*Cactus Speciosus*, a fine plant, in most splendid bloom—a bouquet of beautiful and very choice flowers.

Henry Rodewald—A fine collection of pansies, and some new roses, Lee's crimson perpetual, white perpetual moss, belle elise, addo, and one variety unknown.

Zebulon Waters—Two beautiful bouquets of choice flowers.

John Feast—*Gorteria pavonia*, *alstroemeria psithcina*, *enca pregnans*, *banheria uebiicides*, *fuschia globosa*, *septhospermum scandens*, *verbena melendies*, some new varieties of petunias and pelargoniums, many varieties of new fine roses, white perpetual moss, &c.

Edward Kurtz—Yellow noisette rose, azalia *fedifolia*, *verbena tweediana*, perpetual white moss rose.

June 23d—Mr. Zebulon Waters—10 varieties carnations.

Mr. John Feast—*Crassula ceccennea*, very fine, with other flowers.

Zebulon Waters—2 varieties of very fine cherries.

Mrs. Isaac Munroe—A plate of very superior cherries, the grand Tartarian.

CUT-WORM—In some years these larvæ are very destructive to the Indian corn, and of the contrivances for destroying them we have seen that of Parke Shee, of Delaware county, in Pennsylvania, is the most simple and most expeditious. A pair of old wheels from a cart or wagon are fitted with several projections like the cogs of a spur wheel in a mill, which are so formed as to impress in the earth a hole 4 inches deep. The smooth track which the wheel makes on the soft ground, induces the worm in its nocturnal wanderings to follow on till it tumbles into the pit. It cannot climb out, and the hot sun destroys it.—*Farmer.*

SAXON RAMS FOR SALE.

For sale, 4 full bred Saxon Rams, 3 to 4 years old—Enquire of EDWARD KENLY. 3t

A DURHAM BULL.

For sale, a superior Bull—he is of fine size and unexceptionable pedigree, which will be given next week—he comes from a strain of deep milkers, and is himself the sire of several fine animals. Price \$500. je 26 3t

SUPERB DOUBLE DAHLIAS.

ALSO, GARDEN AND FLOWER SEEDS.

The subscriber offers for sale at his establishment the best collection of Double *DAHLIAS* offered to the public, and will warrant every root true to name and colour, but they are too well known to need any comment in their favor, as most all amateurs in the vicinity have seen them in bloom to their great satisfaction, so those who wish to have roots that are genuine, apply at the right place, and lower than any other in the city as to quality.

Besides he offers a general and good collection of *Garden and Flower SEEDS*, fresh imported, that cannot be raised to perfection in this country; he has selected from Europe, and will dispose of them on reasonable terms, with a general collection of Greenhouse, Herbaceous and hardy plants, also Bulbous Roots. Catalogues can be had at his establishment, corner of Pine and Lexington street, Baltimore, by

JOHN FEAST,
Florist & Seedsman.

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every Monday

	PER	FROM	TO
BEANS, white field,.....	bushel.	1 00	1 10
CATTLE, on the hoof,.....	100lbs	9 00	10 00
CORN, yellow.....	bushel	72	73
White.....	"	69	70
COTTON, Virginia,.....	pound	9	11
North Carolina,.....	"	10	11
Upland,.....	"	9 1/2	11
Louisiana — Alabama	"	11	12
FEATHERS,.....	pound.	48	50
FLAXSEED,.....	bushel.	1 12	—
FLOUR & MEAL—Best wh. wh'tfam.	barrel.	10 00	—
Do. do. baker's store	"	—	—
SuperHow. st. from stores	"	7 87	8 00
" " wagon price,	"	7 37	7 50
City Mills, super.....	"	7 75	8 00
" extra	"	8 00	—
Susquehanna,.....	"	8 00	—
Rye,.....	"	4 50	4 62
Kiln-dried Meal, in hhd.	hhd.	18 00	—
do. in bbls.	bbl.	3 50	—
GRASS SEEDS, wholes. red Clover,	bushel.	—	11 00
Kentucky blue	"	2 50	3 00
Timothy (herds of the north)	"	2 25	2 50
Orchard,.....	"	2 00	2 50
Tall meadow Oat,.....	"	—	3 00
Herds, or red top,.....	"	1 00	1 25
HAY, in bulk,.....	ton.	10 00	15 00
HEMP, country, dew rotted,.....	pound.	6	7
" water rotted,.....	"	7	—
HOGS, on the hoof,.....	100lb.	7 00	—
Slaughtered,.....	"	—	—
Hoes—first sort,.....	pound.	9	—
second,.....	"	7	—
refuse,.....	"	5	—
LIME,.....	bushel.	33	34
MUSTARD SEED, Domestic, —; blk.	"	3 50	4 00
OATS,.....	"	33	34
PEAS, red eye,.....	bushel.	—	1 12
Black eye,.....	"	1 00	1 12
Lady,.....	"	—	—
PEAS, in the stone, cargo, ton.	3 62	—	—
Ground,.....	barrel.	1 50	—
PALMA CRISTA BEAN,.....	bushel.	—	—
RAGE,.....	pound.	3	4
RYE,.....	bushel.	80	87
Susquehanna,.....	"	—	nons
TOBACCO, crop, common,.....	100lbs	3 50	4 00
" brown and red,.....	"	4 00	6 00
" fine red,.....	"	8 00	10 00
" wrappery, suitable	"	—	—
for segars,.....	"	10 00	20 00
" yellow and red,.....	"	8 00	10 00
" good yellow,.....	"	8 00	12 00
" fine yellow,.....	"	12 00	16 00
Seconds, as in quality,.....	"	—	—
" ground leaf,.....	"	—	—
Virginia,.....	"	4 50	6 00
Rappahannock,.....	"	—	—
Kentucky,.....	"	5 00	8 00
WHEAT, white,.....	bushel.	1 85	—
Red, best	"	1 55	1 60
Maryland inferior	"	1 50	1 55
WHISKY, 1st pf. in bbls.	gallon.	33 1/2	34
" in hhd.	"	32	—
" wagon price,.....	bbl.	—	31
WAGON FREIGHTS, to Pittsburgh, 100lbs	1 25	—	—
To Wheeling,.....	"	1 50	—
WOOL, Prime & Saxon Fleeces,.....	pound.	40 to 50	20 22
Full Merino,.....	"	35	40 18 20
Three fourths Merino,.....	"	30	35 18 20
One half do.....	"	25	30 18 20
Common & one fourth Meri.	"	25	30 18 20
Pulled,.....	"	28	30 18 20

MORUS MULTICAULIS TREES.

The subscriber has from 25,000, to 30,000 Morus Multicaulis trees now growing at his residence, with roots of 1, 2, and 3 years old, which will be ready for sale this fall, and which he will sell on moderate terms.

EDWARD P. ROBERTS.

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,.....	barrel.	—	—
BACON, hams, new, Balt. cured	pound.	13	13 1/2
Shoulders,..... do.....	"	11	—
Middlings,..... do.....	"	11	—
Assorted, country,.....	"	8 1/2	9 1/2
BUTTER, printed, in lbs. & half lbs.	"	20	25
Roll,.....	"	—	—
CIDER,.....	barrel.	—	—
CALVES, three to six weeks old.....	each.	5 00	6 00
COWS, new milch,.....	"	25 00	40 00
Dry,.....	"	12 00	15 00
CORN MEAL, for family use,.....	100lbs.	1 62	—
CHOP RYE,.....	"	1 50	1 60
EGGS,.....	dozen.	12 1/2	—
FISH, Shad, No. 1, Susquehanna,	barrel.	9 75	10 00
No. 2,.....	"	9 50	—
Herrings, salted, No. 1,.....	"	4 25	4 75
Mackerel, No. 1, ——— No. 2	"	—	—
No. 3,.....	"	—	—
Cod, salted,.....	cwt.	3 00	3 25
LARD,.....	pound.	10	11

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

		VIRGINIA.
U. S. Bank,.....	par	Farmers Bank of Virgi. 1 1/2
Branch at Baltimore,.....	do	Bank of Virginia,..... do
Other Branches,.....	do	Branch at Fredericksburg, do
MARYLAND.		Petersburg,..... do
Banks in Baltimore,.....	par	Norfolk,..... do
Hagerstown,.....	3a	Winchester,..... do
Frederick,.....	do	Lynchburg,..... do
Westminster,.....	do	Danville,..... do
Farmers' Bank of Mary'd, do	do	Bank of Valley, Winch. par
Do. payable at Easton,.....	do	Branch at Romney,..... par
Salisbury,.... 1 per ct. dis.	do	Do. Charlestown,..... par
Cumberland,.....	par	Do. Leesburg,..... 14
Millington,.....	do	Wheeling Banks,.... 3 1/2a
DISTRICT.		Ohio Banks, generally 5a6
Washington,.....	Banks, 1/2 p.c.	New Jersey Banks gen. 3
Georgetown,.....	do	New York City,..... par
Alexandria,.....	do	New York State,..... do
PENNSYLVANIA.		Massachusetts,..... 1 1/2a2
Philadelphia,.....	par	Connecticut,..... 1 1/2a2
Chambersburg,.....	3	New Hampshire,.... 1 1/2a2
Gettysburg,.....	do	Maine,..... 1 1/2a2
Pittsburg,.....	2 1/2	Rhode Island,.... 1 1/2a2
York,.....	3	North Carolina,.... 5
Other Pennsylvania Bks. 2	do	South Carolina,.... 6a7
Delaware [under \$5].... 1 1/2	do	Georgia,..... 8a10
Do. [over \$5]..... 1 1/2	do	New Orleans,..... 8a10
Michigan Banks,.....	10	
Canadian do.....	10	

FOR SALE,

Two superior DEVON bulls, 4 years old this spring, of the purest blood in the country, fine form and remarkably large. Any gentleman wishing to procure one will find it to his advantage to embrace the present opportunity, as they will be sold at the low price of \$100 each, deliverable in Baltimore.

Applications in writing, post paid, to be made to the subscriber.

EDWD. P. ROBERTS, Baltimore, Md.

may 29

3t

NEW BALTIMORE SEED STORE.

THE Subscriber having located himself in Grant street, near Pratt, three doors in the rear of Dinsmore & Kyle's Grocery Store, takes this early method of informing his friends and the public, that he has commenced the GARDEN AND FIELD SEED BUSINESS, and solicits a portion of public patronage. He has on hand and intends keeping, at all times, a constant and general assortment of the very best FIELD AND GARDEN SEEDS, a part of the latter, being of the last year's importation, and all the growth of 1837.

Also GARDEN AND FARMING TOOLS, of various kinds; a few barrels of ITALIAN Spring WHEAT; BADEN CORN, raised, and carefully selected by Col. Mercer—DUTTON; MANDAN; SIOUX; AND EARLY SUGAR CORN; CLOVER; TIMOTHY, ORCHARD, & HERD'S GRASSESSEDS; BUCKWHEAT;

OATS; MILLET, WHITE, LUCH CLOVER; LUCERNE; TREFOIL; SAINFOIN, ENGLISH RYE GRASS, &c. &c.

Farmers, Gardeners, Merchants, Captains of Vessels, and others, are invited to give him a call, as they can be supplied not only with Field and Garden Seeds of all kinds, but also with PLOUGHS; HARROWS; STRAW CUTTERS; CORN SHELLERS; WHEAT FANS, WHEAT CRADLES, &c. &c., together with all other kinds of useful implements of Husbandry, manufactured and kept constantly for sale by John T. Durdin & Co. at their Agricultural Store, also in Grant street. Orders for articles in the above line by mail or otherwise, shall be faithfully and punctually executed.

THOMAS DENNY,

Grant street, 3 doors in the rear of Dinsmore & Kyle's

WATKINS' PATENT WHEAT FANS, HARVEST TOOLS, &c.

THE subscribers, being confident of the superiority of the Watkins' Fan have made arrangements with the Patentee to manufacture the article in this city.

The difficulty of procuring these fans from Washington county in this State, (where they were formerly manufactured) and the high price at which they were sold has much retarded their introduction in our immediate vicinity; they are now manufactured by us at a reduction of about 40 per cent. on original price, and made of warranted materials and by experienced workmen. The Riddles and Screen of this fan are operated upon by a simple crank motion, and the general construction of the fan is such as to give the wind a proper direction and great force on the riddles, thus enabling farmers to clean double the quantity of grain and put it in better order for market than can be done by those in common use. Our assortment of Fans and Harvest Tools are as follows, viz:

Watkins' Patent Fans	\$30.00
do do with unshipping heads	32.00
Common Crank Shake Patent Fans,	25.00
do do do with unship heads	27.00
do Dutch Fans,	20.00
Box Fans; a very complete fan and well suited for small farms,	16.00
Grain Cradles with 4 a 8 fingers and warranted	—
Scythes attached,	4.00
do do with wire braces,	5.00
Grass Scythes and Sneaths, in complete order for mowing	2.25
Grain, Grass and Bramble Scythes,	—
Sickles and Grass Hooks,	—
Scythes Stones, assorted kinds, Ripes for whetting	—
Grain Scythes,	—
Horse and Hand Hay Rakes,	—
Cradlers' Hammers,	—
Hay Forks, of sizes suitable for making and pitching hay,	—
Threshing Machines, &c.	—

Also,

Corn and Tobacco Cultivators, Corn Harrows, Field and Garden Hoes, and as usual, a large assortment of IMPLEMENTS AND SEEDS, comprising nearly every variety used by the planter.

ROBERT SINCLAIR, Jr. & Co.

Light street near Pratt street wharf.

june 4

2t

DAHLIA ROOTS.

The subscriber can furnish any quantity of DAHLIA ROOTS to the number of one thousand, recommended to be a choice variety, all of the double kind, and from the well known nursery of Samuel Reeves, Esq'r. near Salem, New Jersey. I can also furnish from the same nursery very superior APPLE TREES for spring planting, if orders are given in soon for them. Peach Trees cannot be furnished from the said nursery before next fall.

J. S. EASTMAN.

CONTENTS OF THIS NUMBER.

Notice of a new paper devoted to the silk culture—do. of the Delaware Register—Dutton corn—the hay harvest—cultivation of beets—Clairmont Nursery—timothy meadows—Surrey farm—hint to silk growers—the morus multicaulis—mulberry plantation—mineral manures—on mowing—efficacy of lightning rods or conductors—on soils—prospects of the cotton crop—geological survey of Maryland—to measure hay in the stack—repelling of insects—Md. Horticultural Society—the cut-worm—prices current—advertisements.

THE FARMER & GARDENER

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, E. P. ROBERTS AND SAMUEL SANDS—EDITED BY E. P. ROBERTS.

No. 11.

BALTIMORE, MD. JULY 10, 1838.

Vol. V.

—THIS publication is the successor of the late

AMERICAN FARMER,

and is published at the office, at the N. W. corner of Baltimore and North streets, over the Patriot office, at two DOLLARS AND FIFTY CENTS per annum, if paid within one month from the time of subscribing, or \$3 if after that time. All letters to be post paid.

BALTIMORE: TUESDAY, JULY 10, 1838.

The communication of *Powhatan*, which is in another column, will be found truly interesting. It is from the pen of an esteemed and highly intellectual correspondent, with whom we have but one fault to find, and that is this—that his favors are “too few and far between.” If he knew how much the public valued his writings, we are certain he would not so seldom and so reluctantly gratify them, unless he forms an exception to his kind, and is utterly divested of that ambition, which is the common property of men of genius and learning—the pride of authorship.

Marl.—We insert in another column a very interesting letter from Mr. *George W. Karsner*, of Delaware, to the editor of the “*Delaware Register*,” detailing his experiments in the use of the *green sand*, or *marl*. The result of those respective experiments, are highly satisfactory, and go incontestibly to prove, that in this article, farmers convenient to the deposits of it, have a most invaluable agricultural resource. To the people of Delaware, New Jersey, and those other States, where it exists, it cannot fail to be of immense and lasting advantage, if they but improve the opportunity which it offers of fructifying their fields. That they may embrace the occasion, so propitiously presented, of improving their lands and bettering their conditions, is our most sincere wish.

Marl, in some of its forms, we have no doubt, exists in the tide water regions of all the Atlantic States, and it remains for the legislatures thereof, to put on foot such surveys and explorations as will identify its localities. They owe such efforts like to their constituents, themselves, and to that pride of state, which should characterise every representative of the people.

Succoring Dutton Corn.—In answer to the question—“Should Dutton corn be succored?” the editor of the *Cultivator* says:

“We answer—the same rule will apply to the Dutton that applies to other corn—it increases the proportion of sound grain, and somewhat accelerates the ripening process—though it does not, we think, increase the quantity, while it sensibly diminishes the good forage, and causes additional labor. We do not succor our corn.”

Buckwheat.—Let every farmer who regards the comfort of his family—who values the gratification of their appetites—put in a patch of this grain as speedily as possible, and his good wife, in the superior quality of her *cakes*, will make him confess that there is no accompaniment for a winter breakfast equal to bread made from Buckwheat. But independent of its good qualities as a table luxury, it has other things to recommend it. It is the best thing on which hens can be fed in the winter, the large quantity of lime which it contains contributing greatly towards the formation of the shell of the egg, and thus imparting to the hen increased capacity for laying at that period of the year. It is good food for horses and hogs, possessing, when ground, the property of fattening in an eminent degree.

Turnips.—Let us recommend to our agricultural brethren to get in their turnips as early as convenient. If possible, they should be sown by the 25th of this month. The old rule of delaying this operation until the 20th of August is too late, as in the changed condition of our climate, the early frosts are liable to cut them off before time is allowed for them to ripen, if delayed that long.

But above all, we recommend that no one should attempt to sow turnips without *manuring his ground well*. Cow dung, ashes, or well rotted manure is to be preferred, and, in all cases, where practicable, four or five bushels of dry ashes to the acre should be sown on the turnips, while the dew is on the plant, as soon as they come up. If this process is properly performed, the fly will not be able to effect their destruction. Should ashes not be convenient, 1 bushel of plaster of Paris and 4 lbs. of flour of sulphur will answer. Should this not be to be had, three bushels of *bran* sown on them to the acre will answer.

Let the grower be sure to thin them out to the distance of 12 inches apart, and hoe them two or three times, so as to keep the soil open until the leaves are sufficiently expanded to shade the ground and keep down the weeds.

If the labor of *hoeing* is more than he can accomplish, let the cultivator run his harrow through them, which will perform the double office of *thinning* and *working* the ground, and greatly add to the quantity of his crop. He need not be afraid of injury from the use of the harrow. This latter operation should be performed just before a rain.

Corn.—The *Cultivator* should be freely used in the corn field during this month, to extirpate weeds and grass, and keep the ground open.—This instrument alone should be used after the corn attains much size, as it contributes greatly towards the growth, and advances the early maturity of the growing plants, without injuring their roots. We have long thought that the cutting up the roots of corn with the plough, was the cause of its being fired, and this opinion, we think, is founded in nature and reason, as it must be obvious to common sense, that every wound and laceration of the roots must act injuriously, by depriving the stalks not only of their sources of pasturage, but by causing a positive waste of nourishment absolutely necessary to their complete development. Besides this serious objection, it turns up the manure, exposes it to the deteriorating influence of the sun and air, and thus robs the grain of the nutriment intended to perfect its growth.

Briars.—If you have briars growing where your cattle feed, pour brine over them, and your cattle will, in their love for salt, destroy them.—The labor of pouring brine over the briars, will not be much greater than that of salting your cattle, while that more irksome one, of cutting up the briars, will be performed by your cattle, so that, as a matter of economy of time and money you should pursue this course to get rid of those most troublesome pests.

A wager is a fool's argument.

Hay.—In stacking away your hay sprinkle salt over each layer. A peck of salt to the ton of hay is enough. The operation prevents the hay from heating, improves its quality, and renders it far more acceptable to your stock, and, in a great measure, does away with the necessity of salting them through the winter.

Meadows.—Farmers will consult their interest by keeping their stock off their meadows after the grass is cut; the after growth being necessary to protect the roots from the inclemency of our long and severe winters. We are sure that much harm is done to meadows by grazing them in the fall, and that it is to this cause we are to ascribe their early giving out, as every blade of grass thus destroyed, will be succeeded by some pestilent weed, as the earth makes a continual effort to clothe itself with herbage of some kind or other, and should man by his folly deprive it of its artificial covering, nature comes in to supply the effect of his bad management.

If weeds should spring up in your clover fields after your last cutting, they should be cut down and carted off to your dung heap; by this operation two good things are effected: 1st, the weeds being taken off, do not seed and fill your clover field with their kind the succeeding year, and consequently, a clean crop of hay will be secured—and 2dly, your stock of manure will be increased.

Weeds.—If time can be spared, let the weeds and briars from the head-lands, lanes and fence corners, be cut up and carted to the manure heap, and next year your stock of these pests will be quite decreased.

Test of good Flour.—Mr. John Babcock, of London, gives the following rule to ascertain the quality of flour; as the test is a simple one, and we doubt not as good as simple, we transfer it to our columns, in the hope that it may enable those who purchase the article to select it of good quality. Should it prove of use, we know we shall have the thanks of every good house-wife, for there is nothing that ladies, who are attentive to the economy of house-keeping, more deservedly pride themselves on than good bread, and this cannot be obtained without good flour.

"Flour which is pure and unadulterated, may be known by your seizing a handful briskly, and squeezing it half a minute; it preserves the form of the hand in one piece, although placed rudely on the table. Not so with that which contains foreign substances; its adhesive property is weak, and it falls to pieces immediately. The whiteness of flour is no evidence of its goodness; the different materials used in adulterating flour, have a tendency to whiten it."

The Crops generally.—In all directions we learn that the wheat crops are more abundant than for many years. On the Eastern Shore of this state, from all we hear there will be more made than there were the two last years together. The crop in Virginia will prove equally productive.

The crop of *Rye* on the Eastern Shore of this state, is, however, not so good: in other quarters of our country, we are pleased to learn that this crop has proved all that the farmer could desire.

The corn every where, whence we have information, looks well, and promises to reward the husbandman well for his labor.

The crop of grass is every where abundant, and, as far as the cutting has proceeded, has been got in well, so that the beasts of the field will have ample supplies of good hay the coming winter.

Curing of Hay.—No farmer should cure his hay except in small cocks; besides being the safest way, the hay is 20 per cent. better when thus cured.

Management of a horse while travelling.—The whole art of managing a horse while on a journey, so as not to injure him, is contained in the subjoined simple petition. In every line there is so much common sense, so much true philosophy, that the justness and propriety of the rules laid down will strike the most cursory reader.

Petition of the Horse to his Master.

Up the hill urge me not;
Down hill crowd me not;
On the plain spare me not;
In the stable forget me not.

Prevention of lice on fowls.—When confined, or when simply roosting, in an enclosed house, fowls are apt to become infested with lice, in the warmer months. Dry wood ashes, put on the ground where they dust themselves, will very soon free them.

The Tobacco crop of Tennessee.—We are truly glad to learn that the early fears which were entertained of the destruction of the tobacco plants have not been realized to the extent anticipated, and that the crop promises to be a fair one.

VIRTUES OF MARL TESTED.

Letter from George W. Karsner.

Mr. Huffington.—Dear Sir—In compliance with your request, I now offer for your consideration, and if you think it worthy, for publication, in your valuable work, a plain statement of facts relative to my experience in the use of an article which is generally termed marl, of the green sand character. In what is called marl, there is a great variety, both in appearance and substance. Mine is all of the kind known by the name of green sand marl. Did I not consid-

er it a duty I owe to my fellow-citizens of Delaware, in addition to my promise to you, I should have declined making this statement, and have left the task to be performed by some abler and more experienced person. But considering that I was among the first in our State, who used the green sand as a fertilizer of the soil, and hoping that a knowledge of the results of my experiments from its use may have a tendency to benefit the farmers of Delaware, I shall proceed to disclose them. I am still making other trials of this substance, and when the results are known, I will communicate them to you.

The discovery of the green marl of New Castle county, begins very generally, to claim the attention of farmers, particularly in the lower part of the county, although there has not as yet been very extensive use made of it. In the beginning of January 1835, I discovered, what I considered at the time, a bed of excellent marl. I had found the same substance on my premises nearly a year previous, but from its not containing any visible marine substance, such as oyster and muscle shells, I had no confidence in its valuable quality, and therefore suffered nearly a whole year to be lost, before I tested its value by application to the land. In the winter of 1836, I caused an opening to be made in a ravine, near the waters of Silver creek, which passes through my farm, and had from thirty to forty loads thrown out, which lay until the spring, when I commenced using it on different crops. My first experiment was made upon oats sown in April; but from the large quantity used, the oats did not seed or fill well, although there was a very luxuriant growth of straw, much of which was over five feet high, and of great thickness. I exhibited a sample of the oats to the Hon. A. Naudain, and his son Dr. James Naudain; and at the same time a specimen of the marl, for their inspection and analysis.—They both assured me, that the growth of the oats was alone a sufficient test to satisfy every one of the value of the marl. Nevertheless, they were kind enough to make for me a minute examination of its quality, and the result of their analyses proved that my marl, on an average, contained ten and a half per cent. of potassa, besides a small portion of lime and gypsum. And here allow me to express publicly, my gratitude and thanks to those gentlemen, for the trouble and expense they took upon themselves, in order to ascertain by scientific experiments, the component parts and qualities of my marl.

Having thus become convinced of its fertilizing quality, I proceeded to get out and use a larger quantity, both for the purpose of improving my lands, and to bring the substance as a manure into more general notice; which I now fully believed, if found in sufficient quantities, would sooner or later, be the means of rendering the poor lands of Delaware equally productive, if not more so, with the limed lands of Pennsylvania. I was also more confirmed in my opinion, by reading in the New Jersey papers, various accounts of experiments in the use of a like substance, and their great success on the lands of that State. Thus encouraged, I got out all I could on my own lands.

My next experiment was on a late crop of potatoes, planted in the latter part of May. I manured the whole lot with stable manure, with the

exception of four rows, two of which were planted without manure or marl, and the other two left for the experiment of marl. On these two rows, I placed the marl nearly of the same thickness as I did the manure, on the other parts of the lot. I watched the progress of the crop closely, and found during the season, that the manure caused a much larger growth of tops than the marl, and the marl a considerably greater growth than where the soil was suffered to remain in its natural state. This showed me again very plainly, that marl was worth something. Another fact struck my observation—the tops of the manured potatoes had dried and burnt very much, while those that were marled, retained until frost a very green and luxuriant appearance. I did not expect, from the growth of the tops, that the marled rows of potatoes would be as productive at the root, as the manured; but when I gathered the crop, I found on actual measurement, that the marled rows had one-fourth of a bushel of potatoes more, than any two rows of the manured in the lot; and near one hundred per cent. more than the soil alone was able, or did produce. This experiment I assure you, fully confirmed me in the belief, that the green sand, or marl, was not only equal, but superior to stable manure for the growth of potatoes.

My next trial took place in the month of August in the same year, on a crop of buckwheat.—The ground was very poor, being situated on the side of a hill, where the soil was entirely washed away, and light and sandy in its nature. I had it well broken up with the plough in May, harrowed and let it lay until the first of August, when I hauled upon it and spread broad cast, about 160 bushels to the acre, as nearly as I can judge. I then gave it another very shallow ploughing, and sowed the buckwheat, leaving for the sake of contrast, a small spot without marl. The crop grew rapidly, and the difference between the marled land and where none was used was very great.—The natural soil only produced a growth of six or eight inches in height, while that which was marled, averaged nearly 3 feet, and was very luxuriant in its appearance; but in consequence of the early frost of that year, my crop of buckwheat was considerably injured, and my profits greatly lessened. This, however, did not alter my opinion as to the value of the marl, as the same result must have happened, no matter by what means the soil had been enriched.

I should have previously noticed, that in June, on a single land in my clover field, I spread five small cart loads of marl not averaging more than twelve bushels, equal to about 120 bushels to the acre. Its operation was not discovered on the growing crop, as it was nearly ripe at the time, and soon after harvested, but on the second crop, a marked difference was very soon discovered.—A number of gentlemen came to examine it, who concurred in opinion, that there was fifty per cent. more clover on that land; than there was on the adjoining lands in the same field. I was satisfied myself, that there was a great difference, but could not believe it so great, until the clover was cut in September for seed, when the opinion of the gentlemen alluded to, was fully sustained. But this was not all the advantages derived from the use of the marl on this land. A very considerable crop of white clover was produced,

which was not to be found in the other parts of the field.

The latter part of the same month (September) the whole field was ploughed preparatory to the wheat crop, which was sown early in October; and although I had realized such an incredible difference in the product of clover, I scarcely entertained a hope of seeing any effect of the marl upon the wheat, as the deep ploughing I use in seeding, I supposed had buried it so deep, that its present effect would be lost, and not be seen again till thrown on the surface, by ploughing for another crop. The winter, if you recollect, set in early, and the wheat had made but little progress during the fall. In the spring of 1837, the wheat generally, looked very indifferent; and the probability was, that we should have a very short crop, as it had been so much injured by the severe winter of 1836-7. As it regarded my own prospects, I would have willingly, early in the season, have taken the cost of the seed and expense of seeding for my crop. But as the season advanced, the prospect brightened; and at harvest, a tolerable crop was realized. On the part of the field I had marled, it grew better than on the manured land, and continued to outstrip it until harvest. A number of neighboring farmers visited the field to witness the growth and appearance of the wheat, and nearly all were of opinion, that there would be at least one hundred per cent. more wheat cut from the marled land, than from any other where neither manure or marl had been used. Among the visitors was our State's geologist, Mr. Booth, and Major Stockton, one of the geological commissioners, who will readily agree, I doubt not, to my statement, of the great benefit derived from the action of the marl upon a part of my wheat crop of the said year, 1837. Since harvest, the same prominent difference is observable in the growth of grasses. The marled land is well set in red and white clover, while immediately alongside of it, little or none is seen. One thing I had nearly forgotten to mention; while nearly my whole wheat field was much struck with rust, the marled part of it was as bright and clear as could be desired; there being neither rust or smut to be found there. The wheat on the marled land ripened, and was ready to harvest several days before the manured wheat.

The field contains forty acres, and I believe if I had marled the whole at the same rate as I did the land, of which I have been speaking, which would have cost me only about one hundred dollars, instead of cutting little more than three hundred bushels, I should have obtained at least 600 bushels. I sold my wheat at \$1.60 per bushel, and if I had marled the whole field, after all expenses deducted, my gain in money could not have been less than three hundred dollars; and that gain would have been on the wheat crop alone, to say nothing of the advance in the value of the clover crop succeeding it.

My next experiment was made on about eight acres of ground in my corn field of last year, 1837. The ground was flushed up, and about 1600 bushels spread upon it, say 200 bushels to the acre. It was harrowed in well, so as to mix with the soil, previously to laying the ground out for planting. The marled lot was selected from the poorest part of the field, which had not been reached with manure, leaving a part of the same

quality of land on each side of the marled lot without marl, that a fair test might be obtained.—The corn was planted on squares of four feet.—After planting, I watched very closely its progress, and soon found a decided advantage in favor of the marled portion of the field. Its action on the young corn was very apparent and immediate, and by the time it was one foot high, any person could have traced the very last row where the marl had been used, without difficulty. The same difference was visible throughout the whole season; and when the corn generally was burning with drought, that which was marled, looked green and luxuriant, and maintained throughout the whole season, a wholesome appearance, without burning in the least, or changing its color.—The growth of the stock was much larger and higher than any along side of it, and in the earing a still greater difference was to be found. The universal opinion of those who examined the field was, that the crop would be doubled on that part which had been marled. Several gentlemen desired me to cause a measurement to be made, of an equal quantity of corn from the natural soil, and the marled land, to which I cheerfully assented. When gathering the crop, I made an accurate measurement of seven rows without marl, and seven where it had been used. The result was, that from the seven marled rows, I had 29½ bushels, and from the seven of natural soil, only 12½ bushels; making a difference in favor of the marled land, of nearly 130 per cent. The land I have now in wheat and oats, has all been marled; when these crops are harvested, I will cheerfully inform you of the results, for the information and benefit of the farming interest of Delaware.

There are large quantities of excellent marl in St. George's hundred, and many pits now opening, near Drawyer's creek, on the farms of Messrs. Polk, Croft, Rogers, McClane and Simms, within one mile of Cantwell's bridge; also, on the waters of Silver run, on the lands of Messrs. Glazier, Vandegrift, Townsend, Higgins, Jefferson and my own, which would not be to haul more than one and a quarter miles to Appoquinimink creek, where there is five and a half feet of water. I have lately opened a road to Augustine landing, on the Delaware river, at the lower end of Reedy Island, where I am depositing for sale, a quantity of green marl. Vessels drawing eight feet, can land and depart from this landing. The present price at the pits, is twenty-five cents per ton, which is very low indeed; but that is as it should be, until the use of the marl becomes general, and its benefits fully known and acknowledged. I am selling mine at the said price, and find the demand constantly increasing. I should also mention, that Thomas Stockton and the Messrs. Cleavers, near Port Penn on the Delaware, have green sand marl of good quality; as have several other persons in that section of the county. The quantity is thought to be inexhaustible in St. George's hundred; and we flatter ourselves, that, should the agricultural community take a proper interest in applying it to their lands, in less than ten years from this time, St. George's hundred must become the garden spot of the State of Delaware. You will perhaps say we are too sanguine in our hopes and expectations—if so, I will just refer you to the benefits derived to a part of New Jersey, which I visited for the ex-

press purpose of examining the Jersey marl and its action upon the soil. There the most sterile soil, has, in less than ten years, become almost a garden spot. Land which sold ten or twelve ago in the vicinity of Woodstown, for less than ten dollars an acre, cannot now be purchased for one hundred dollars an acre—and this sum has been offered and refused for much of it; the increased value of which is wholly to be attributed to the use of marl such as ours, and of no better quality. Our soil is naturally much better than that, why then, may we not anticipate similar advantages?

Your readers may rely upon the above statement of facts, and I hope they may profit by them. In this substance, the means is provided by Providence to enrich our lands in all parts of the State, and thus stay the tide of emigration to the wilds of the west; for what Delawarian would leave his dear little State, who has comfort and independence at home.

Near the Trappe, New Castle co., June, 1838.

To the Editor of the Farmer and Gardener :

A year or two ago there was a good deal said in your journal about a destructive little insect called chinch-bug (sometimes *chink bug*, *chintz*, and various other changes, almost as numerous as those which were rung on the name of Douster-devil)—which said insect you were to send to some great entomologist in London,* doubtless for wise and useful purposes. Since then I have observed nothing in the *Farmer & Gardener* on the subject. Within that time, however, they have been continually increasing in numbers, and no means have yet been devised to put a stop to their ravages. They now swarm in myriads over our wheat fields; and wherever the land is poor, the crops are nearly destroyed in some neighborhoods.

But I incline to think the aggregate product of our wheat crops will not be materially diminished by them. There has never been a greater crop within my knowledge. The wheat has ripened without being subject to any of the usual attendant evils of Hessian fly, rust, &c. Only the storms of the past week have prostrated it in some places, and tangled it generally, which will add considerably to the labor and expense of harvesting. But notwithstanding, there is abundant cause for thankfulness—and I trust a bountiful nature and good prices will once more make the heart of the farmer leap with joy—diffuse plenty throughout the land—and allay the thirst for emigration which numerous disastrous seasons have contributed to inspire.

So far from coinciding in opinion with certain writers,—I was going to say philosophers,—that in the course of a few short years, winter grain will no longer be cultivated in the middle and northern states in consequence of a gradual depression which the temperature of the earth is undergoing; I entertain the belief that for a series of years to come, we shall be blessed with bountiful crops. In regard to a change of temperature, the most philosophical opinion is, that the earth is very gradually drawing nearer and nearer to the sun, by a slight preponderance of the centripetal over the centrifugal forces. The conclusion therefore is, that there must be a gradual increase of temperature. And in respect to a favorable change

of the seasons, observant men have long been aware that seasons of the same character almost uniformly cluster together. Thus for the last six or seven years, the hopes of the farmer have been continually blighted—while previously, for an equal or greater length of time, the wheat crop was as certain as any other. Last year was the dawn of a better day; and though I pretend to be neither a prophet nor the son of a prophet, yet I then ventured to predict a still better crop for the present year. The cycle may be of longer or shorter duration; but for a period of some years, we may confidently expect that the earth will continue abundantly to reward the labors of the husbandman, in proportion to the energy and skill with which he conducts his operations.

Virginia, July 3d.

POWHATAN.

P. S. The general commencement of the harvest was on the 25th ult.

[*The bugs were sent, but ere they arrived were so grounded to powder by the friction of their transit, as to render it utterly impossible to tell to what genus they belonged.—*Ed. Far. & Gard.*]

BUTTER MAKING.

In a few remarks on this subject, it is not necessary for us to tell the dairy women that it is of the first importance that her milk pails, pans, pots, churn, &c. should be kept perfectly clean and sweet, for they are as fully aware as we can be, that unless this first grand essential of dairy management is *strictly* attended to, their whole efforts to produce either good butter or cheese, are in vain. But after all their care and precaution, their expectations are sometimes disappointed—the produce of this labor does not, in quality, come up to what they anticipate, and for what earthly reason they are not able to tell. It appears to them, that no neglect on their part can be the cause—they have been careful that all the preliminaries and the whole operation should be performed with skill, but still they are disappointed—there is wrong management somewhere, but it is beyond their ken to discover it. There are some few facts on this subject, which we have learned from agricultural books and papers, and confirmed by experience which perhaps are not so generally known as they should be.

That there is a great difference in the milk of different cows, every one of limited experience must have noticed, and that there is an equal difference in cream, and consequently in the butter made from it, is a fact equally apparent to an observer.

If a cow is driven a long distance or driven fast shortly before milking, it injures the quality of the milk, and it will not produce so much or so good cream.

If milk is disturbed after it cools and before the cream rises, it injures its quality and diminishes the quantity. Care should therefore be taken to strain the milk as soon as possible after it is drawn from the cow and before it cools. If milk be kept warm for any great length of time after it is strained, the cream will not rise to any degree of perfection. Therefore, the quicker the milk cools after it is in the pans, the greater quantity and better quality of cream will you obtain.—Wholesome pure air, is also an essential to raising cream in any degree of perfection.

Cream is lighter than milk, and the better the quality of the cream the lighter it is. Consequently, the cream that first rises to the surface, is the best. None but the richest and lightest particles of cream can rise through thick milk; therefore, such milk gives cream of a superior quality, but less in quantity than thin milk. But the milk is better as it retains a portion of the cream in it—The milk in the cow's udder, is, in some degree, similar to what it is after standing some time in the pail.—The richest rises to the top, hence, the first drawn is not so good, and will not produce so much or so good cream as the last, and should be set in separate pans.

In order to produce a superior quality of butter, the best cream should be obtained, and in no case suffered to stand until it is mouldy, or even until it is quite sour before it is churned. It should never be diluted with water, or made any warmer than the milk was when taken from the cow—When the process of churning is commenced, it should be steadily continued until butter is produced, which should be immediately taken from the churn and all the milk worked out that can be conveniently. If it is sufficiently hard, it is better to free it from milk entirely; but this is not always the case. It should, therefore, be set in a cool place, and worked thoroughly with the butter ladle the next day. Having entirely freed it from milk, prepare a mixture of ground alum salt, saltpetre, and refined loaf sugar, in proportions of three parts of salt to one of saltpetre, and one of sugar, and work in thoroughly one and a half ounces to every pound of butter, and pack it into jars or firkins covered tight; and at the end of twelve months you will find it sweet.—*Maine Farmer.*

Singing conducive to health.—Many parents in encouraging the development of musical talents in their children, have no other view than to add to the number of their fashionable accomplishments and afford them a means of innocent solace and amusement. It was the opinion of Dr. Rush, however, that singing is, by young ladies, who by the customs of society are debarred from many other kinds of salubrious exercise, not only to be cultivated as an accomplishment, but as a means of preserving health. He particularly insists that vocal music should never be neglected in the education of a young lady; and states that besides its salutary operations in enabling her to soothe the cares of domestic life, and quiet sorrow by the united assistance of the sound and sentiment of a properly chosen song, it has a still more direct and important effect. 'I here introduce a fact,' remarks Dr. Rush, 'which has been suggested to me by my profession, and that is, that the exercise of the organs of the breast by singing, contributes very much to defend them from those diseases to which the climate and other causes expose them. The Germans are seldom afflicted with consumptions, nor have I ever known but one instance of spitting blood among them. This, I believe, is in part occasioned by the strength which their lungs acquire by exercising them frequently in vocal music, for this constitutes an essential branch of their education. The music master of our academy has furnished me with an observation still more in favor of this opinion. He informed me that he had known

several instances of persons who were strongly disposed to consumption, who were restored to health by the exercise of their lungs in singing.

The following communication was read before the Philadelphia Society for promoting Agriculture, at its regular monthly meeting, April 18, and ordered to be published in the Farmers' Cabinet.

STALL FEEDING CATTLE.

To the Philad. Society for promoting Agriculture.

Believing that the cause of Agriculture may be promoted by practical observations and statistical facts, and that theories and principles should be based on these, I beg leave to communicate a statement regarding four bullocks which I have had the pleasure of bringing to a high degree of perfection. One of these steers was admitted to be one of the fattest ever exhibited in the Philadelphia market, and the others very little inferior to him. By the annexed statement it will be seen that the result of between two and three years stall feeding, has been to pay me full prices for the grain, beets, and hay consumed, and allow the manure for straw and labor, a result that I think would satisfy any reasonable farmer or grazier.

At the same time to succeed well with feeding large cattle, it is necessary that they should be kind and good feeders. They should also be attended with especial care. Without these prerequisites the farmer had better sell his grain than stall feed cattle.

ISAAC W. ROBERTS.

L. Merion township, Mont. co. Pa. April 17, 1838.

Statement to May 1st, 1838.

Nov. 15, 1835, bought two steers, estimated at 1750 lbs. dead weight, cost \$110 00
Commenced stall feeding them on the 1st Dec. and continued 150 days at 27 qts. per day, or 126 bushels at 70 cents, 88 20
They consumed two tons of hay at \$16, 32 00
The grain consisted of equal parts of corn and oats, ground, or corn and "mill stuff," or wheat bran. On the 1st of May, 1836, turned them on grass with a pair of oxen, estimated weight 1850 lbs. and valued at \$150 00

Statement from 1st May, 1836.

Cost as above of the four cattle \$380 20
Pasture during the season for the four, 80 00
Commenced feeding grain on the 1st of October, twice a day till 1st Dec., and then three times per day till 1st May, 1837, equal to 190 days full feeding of 2 bush. per day or 380 bush. as above at 70 cents, \$266 00
100 bushels Mangel Wurtzel Beets at 25 25 00
5 tons Hay at 80 00
\$331 20
Grass during the summer of 1837, 80 00
Commenced feeding grain on 1st Sept. 1837, twice per day till 1st Dec., and then three times per day till 19th Feb. say 140 days full feeding, or 280 bus. at 70 cents, 196 00
100 bush. Mangel Wurtzel, at 25 cents, 25 00
3½ tons hay, at \$12, 42 00

\$1,174 20

On the 19th Feb. 1838, and sold them to Messrs. Drum, Wartman & Co. victuallers, for \$1290—In the spring of 1836, the two steers would have sold for \$240; and in the spring of 1837, I estimated them at current market price, as worth 750; and if then sold there would have been an apparent loss, but it should be remarked in explanation that the stall feeding extends to the 1st of May, whereas the season for selling is from the middle of Feb. to 1st March, when their cost was about what I estimated them as worth to the butcher.

RECAPITULATION.

First cost of the four cattle,	\$260 00
Pasture during two seasons,	160 00
Grain fed to them 786 bushels at 70 cts.	550 20
Mangel Wurtzel 200 bush. at 25 cts.	50 00
7 tons of hay at \$16,	112 00
3½ tons of hay at \$12,	42 00

\$1,174 20

And being sold for \$1200 gives as before stated the manure for straw and labor, leaving a balance of \$27, and paying me a liberal price for the produce of the farm; about two-thirds of the grain consisted of equal measure of corn and oats, and one third corn and mill-feed.

By the foregoing statement it appears that the average increase in value of each animal was about \$100 per annum.

STATEMENT OF WEIGHT AND GIRTH.

STEERS.

Live weight—Dead Weight—Girth.		
No. 1. 2422 lbs.	1671 lbs.	9 ft. 1 inch.
No. 2. 2324 "	1613½ "	8 " 9½ "

OXEN.

No. 3. 2555 "	1991 "	9 " 2½ "
No. 4. 2261 "	1583½ "	9 " 9 "

BLIGHT IN PEAR TREES.

From the Ohio Farmer.

Mr. Chew—I took occasion a few weeks since from my own observation and experience, to question the theory advanced by "Pyrus," a writer in the Genesee Farmer, on the subject of blight in Pear Trees. To get rid of the force of my argument, "Pyrus" modestly says, he is quite satisfied I am ignorant of the true blight, and that my trees died solely from the effects of cold. I have been somewhat familiar with the disease called the Fire Blight for more than forty years, the greater part of which time refers to the neighborhood of Boston, where he cites us for the most severe ravages of the true blight; and truly, I am not able to point out any apparent difference in the commencement, progress, and final result in all I have seen, from the blight which affected mine alluded to in a former communication; except in some instances, I have seen its operation on old trees loaded with fruit at the time.

A writer on the "Cultivation of Fruit, J. J. B." in the last number of the Genesee Farmer which has come to hand, after enumerating different theories on this subject, says: "Another opinion is, that fire-blight is caused by a too rapid growth, producing a superabundant flow of sap in the branches, and consequent surfeit. In proof of this, the fact is adduced, that the most rapid growing trees are most subject to this kind of blight. But as such a cause would be an anomaly in vegetable physiology, it is far more probable it is

produced by injury from the cold of winter, which would of course chiefly affect the largest and most succulent growth." And in a note of the the same writer, in the margin, he says, "The opinion that it is caused by the fruit rotting on the branches, is sufficiently disproved by the fact, that trees which have never borne are liable to it. For an instance of this, see Genesee Farmer, vol. iii. page 273." I quote from the article of "B." alluded to, as follows: "The ordinary attack of the blight was upon the limbs, and of the recent growth, at a distance from the terminal buds. It was first indicated by the bark becoming discolored, the leaves then turned brown, and the termination of the limb often remained green and fresh for days, after the bark below was withered and black. The elaborated sap evidently became vitiated, and carried with it in its descent. No preventive was known, and the best practice was to cut off the diseased limb, at a point where the wood remained healthy, and burn it. I have several trees from which the limbs were almost wholly cut, in a diseased state, which are now putting forth new branches and showing fruit—Where the diseased limbs were suffered to remain, the blight extended to the bole or trunk, and the entire tree, particularly when small, was destroyed. I have probably lost more than a hundred trees, not more than six or eight of which had produced fruit. The blight appeared in my grounds before any of the trees produced blossoms, and there were no bearing trees within a mile of me."

The authority of "J. J. T." and "B." on the subject, so far corroborates what I advanced, that it is probable "Pyrus" will pronounce us all ignoramus. But, with me that is of but little moment. I have no motive in writing but to arrive at the true cause, and a remedy for the blight, in whatever form it may appear. In the face of innumerable instances, where to every appearance the disease called the fire blight operated, and was the same in small and bearing trees, and that too in the same orchard. I am incredulous of the fact, although "Pyrus" still asserts his full belief, "that no tree was ever struck with the real fire blight, until it had arrived at the period and age of blooming; and that no branch or twig was ever affected with it, except a decayed and diseased fruit, or its process was at its extremity."

I am not prepared to say I have arrived at the true theory of the blight, but it appears plausible to me at least.

I apprehend the root of the evil to be in a very extended growth in autumn, so that the new wood does not become refined, but remains soft, porous and eminently exposed to the chilling blasts which follow; and in other cases, the sap rises too early in the spring, so that the cambium is afterwards frozen and vitiated in the tender branches, where, I believe, all concur the blight first begins to operate. In nearly, if not all the cases, in which the blight has come under my observation, it has operated upon trees of the most rapid and succulent growth; and particularly in seasons calculated to produce the effects I have named.

Does not the fact that amputation of the branches before the vitiated matter descends to the well ripened wood not being operated upon by the cold, go far to show the correctness of my position?

If my theory be correct, whatever will promote an early ripening of the wood in the fall, or retard vegetation in the spring, will be the best prevention of fire blight.

JOHN A. LAZELL.

Columbus, Horticultural Garden, }
June, 1838. }

GEOLOGICAL SURVEY OF MARYLAND,

By PROFESSOR DUCATEL.

(CONCLUDED.)

Sec. VI.—On the occurrence of Coal in Frederick county.

Having received information that some indication of coal had been discovered in Fredericktown valley, and that a company had been organized to proceed to its further development, I conceived it to be my duty, before closing my operations for the past season, to make an excursion into that part of the county where those indications were reported to have been observed; with a view of verifying them if possible, so as to be enabled to encourage those interested in the immediate prosecution of their work in their completion, or, under other circumstances, to guard them against any fallacious expectations. The region of country in which the supposed coal formation would occur, comprises an inferior ridge of hills, at the foot of the Catoctin Mountains, known by the name of the Red Hills, which, about the headwaters of the Lower Tuscarora, squires in a S. E. direction, forming what has more recently been termed the Chapel ridge. This ridge is composed mainly of the breccious limestone, associated with a shaly red sandstone amongst which are occasionally seen detached blocks of Trapp rocks. The region extends to the Point of Rocks, where the mineral mass is a compact talcose rock of green colour, and is undoubtedly a primary rock. In the minor hills adjoining, a talcose slate has been cut through by excavations made for the Rail Road.

I confess that I have seen nothing in this direction which favours the opinion, entertained by some, that it embraces an independent coal formation. The supposed indications that were pointed out to me, are not in reality such, being merely the outcroppings of a lead coloured talcose slate; and a specimen of coal, which was exhibited to me, was unquestionably derived from another quarter.

At a place called the Yellow Spring, six miles from Fredericktown, between the Little and Big Tuscarora; there is a remarkable formation presenting strong indications of coal. The associated rocks are, a bituminous shale with impressions and remains of plants that are carbonized, and embracing seams of anthracite; a sandstone enveloping spangles of mica and containing carbonate of lime, a compact limestone slightly bituminous, and a calcareous breccia (Breccia of the Capitol.) Under existing circumstances the precise arrangement of the rocks cannot be determined. The carboniferous shale occasionally appears at the surface, and is at other times enveloped by the calciferous and micaceous sandstone. Ledges of breccious limestone are also seen cropping out, on the more elevated spots of the formation, and, within it, is embreced a band of blue bituminous limestone. The general inclination of the rock is

at an angle of about 45, with a dip to the N. The direction of the formation is N. E. and S. W. and its characteristic features have been traced over an extent of only three miles with an average breadth of one mile. Several excavations have been made into it, with praiseworthy zeal and enterprize by Mr. William Hoffman; but they are of moderate depth—the deepest being only 20 feet, with an additional boring of 40 feet through a grey sandstone. The horizontal diggings into the shale reach only to a few feet, in which seams of coal have been discovered, the largest of which is about two inches.

From the above description of the locality it will no doubt be judged interesting; though it is difficult to pronounce upon its importance as a subject of individual enterprize. The discovery of a coal formation, even of moderate extent, in the vicinity of Fredericktown, would be of incalculable value to its inhabitants, who would be fully justifiable in employing adequate means to bring it to light; whilst such an undertaking would at the same time, certainly merit the encouragement of the State, since it might result in great benefits to the whole community. Whatever assistance I may bring to the project in my official capacity will be most cheerfully given; but warned by past experience, I do not think myself authorized to undertake the search at the expense exclusively of the State; although there is apparently, in the act authorising the survey, a provision for defraying the costs of similar explorations. It behooves me only to say, that in my opinion the subject is deserving the attention of the State, and that to its entire development there should be appropriated a due proportion of the contingent fund of the survey.

Sec. VII.—Concluding Remarks.

Having, in conformity with the plan adopted in my former reports, furnished in the preceding pages an account of such counties, as in the course of my investigations have been either fully explored or sufficiently so, to enable me to give a general view of the actual condition, and of their mineral as well as other resources, it remains for me to submit to your Excellency, a statement of the present condition of our work, its past benefits, and the more sanguine anticipations of ultimate advantages to be derived by the people in the completion of the Survey.

It will be recollected, that the act authorising the survey made it imperative upon me to commence my operations in the tide-water districts, the full examination of which I was to complete before proceeding to the upper counties. It was not supposed, from what was known of the nature of the country, that it contained any great amount of resources, and strong prejudices against its healthfulness, strange misrepresentations of its physical condition were very generally entertained, not only abroad but within our own limits. The thorough examination, which I have had occasion to make of this portion of the territory of Maryland, has resulted in showing, that its agricultural resources are inexhaustible, the average duration of human existence within it equal to that of any other parts of the State, its comforts and advantages superior to all, and its physical aspect as favorable as could be desired. The report of these facts has gone far, it is believed, to remove the unfounded prejudices that rested upon

it, and I appeal with entire confidence to your Excellency for the truth of the assertion that the value of property has been much enhanced by spreading before the world a knowledge of them. If advantage, then, be taken of these resources, I feel authorised to say, that this portion of our State, not long since reported as stricken with pestilence and poverty, will be looked upon as the garden spot of Maryland, and this will have been one of the fruits of the survey. Not only will the happiness of the people and the general prosperity of the country be increased, but its political importance will be augmented, by inducing men of enterprize and property to become our fellow citizens, as has already been the case in many instances within your Excellency's own knowledge.

In carrying out the provisions of the act of 1833, I have not confined myself to a mere indication of the presence of minerals of value, or resources at hand, but I have studied their economical uses, as already known, or likely to arise out of a better acquaintance with them, and in this manner it has been my good fortune to suggest some novel applications of them, for the benefit of both the agricultural and manufacturing interests of the State. Every new inquiry gives rise either to an improvement upon old methods, or to the creation of a new enterprize, and in both ways contributes to increase the industry and to augment the wealth of the State.

Having now completed the survey of the tide-water districts I am prepared to pursue my researches in the upper counties, where it has been long known that great mineral stores lie imbedded, which, although in many places they are already objects of active exploration, still require to be more closely examined into, with a view to their full development, as well as in the confident expectation of reaching new resources. The discovery during the past year of a large body of very valuable ore, in Montgomery Co. is an earnest of what may be expected to be the results of the survey in the upper counties of the State.

Considering then what has been, and what remains to be done, it is gratifying to find that our most sanguine anticipations of the benefit of the survey have been fully realized in the past, and that the future, promises to be equally marked by important results. It is also a cause of gratification to perceive, that wherever the people have had an opportunity of becoming acquainted with the objects of the measure—adopted for their exclusive benefit—it has met their hearty concurrence, whilst the confidence of its original friends in its eventual complete success remains unshaken.

Before concluding, I have to acknowledge my indebtedness to the Topographical Engineer for the drafts, made with his usual neatness and ability, of the Maps that accompany and illustrate this Report.

Map A, embraces Kent and Cecil counties, exhibiting their topography, and indicating their prominent geological features, as well as the principal localities of the mineral resources which they contain.

Map B, of Montgomery county, is less complete in its details, but is also intended to illustrate what has been remarked in the Report of its topography, geological features and mineral resources.

I feel bound, in conclusion, to express to your Excellency, my sentiments of gratitude for the interest you have manifested in my labors, as well as for the many marks of personal kindness I have experienced at your hands. With sentiments of great regard and esteem, I remain,

Very respectfully,

Your obedient servant,

J. T. DUCATEL,

State Geologist.

Annapolis, Dec. 26, 1837.

[From the Genesee Farmer.]

BRIEF HINTS FOR THE SEASON.

A subject too much neglected during the middle of summer is the extirpation of weeds. If the nourishment which goes to support the weeds on some farms were applied to the crop, the owners would soon get rich. Weeds are as injurious to the crop as a herd of intruding cattle, and should therefore be removed with as much determination.

There is one rule which will apply in destroying all weeds of whatever kinds; this is, that they cannot obtain access to the air. Hence weeds, the most difficult of extirpation, are soon routed by cutting them off as fast as they appear above ground, or by burying them repeatedly with a plough.

Repeated ploughings for destroying weeds is best whenever they have obtained possession of the ground, as in case of Canada Thistles, St. Johnswort, and some others; and indeed it is much better to devote the ground a year or two to clearing, where they have spread extensively, than to lose two-thirds of the use of it by them perpetually.

Some weeds are easily removed with a common hoe, as for instance, mulleins, thistles, &c., which infest pastures; cutting them off at the surface of the ground generally destroys them at once. Docks are very easily removed when the ground is softened with rain, by pulling them up.

In order to prevent the trouble of destroying a field of weeds, they should be watched and rooted out at their first appearance, when it will not cost a thousandth part of the labor. Canada thistles, milk weeds, oxeye daisy, couch grass, charlock or field mustard, and others; whenever they first appear, should be immediately destroyed.

Whole fields are frequently seen covered with a luxuriant crop of the large field thistle, if they were cut and raked with a horse rake into large heaps they would make excellent manure.

Farmers should use every means practicable to obtain and preserve all the manure that can be done—they should recollect that a good load of manure properly applied, is better than a silver dollar. What most needs attention now, is to preserve the manure which remains unspread during summer, to prevent its wasting by fermenting and evaporation. This is effected by covering it with a coating of earth mixed with about one quarter lime.

Farm implements should always be of the best kind, even if they cost considerably more; if a workman with a good tool can do one-third more labor, he will soon repay the additional cost.

The advantages of frequent stirring of the earth among crops have been sufficiently proved;—"a

rusty hoe in summer is a sign of a poor farmer." But the practice of *hilling* in cultivating hoed crops, is injurious; and it is found by experience that in all common cases, preserving the surface of the ground flat or nearly so is much preferable. For this reason, the *cultivator* should be used in preference to the one horse plough, and if the rows have been planted straight and even, all the weeds may be cut up by it within two or three inches of the plats.

Mowing should not be commenced until the stalks of grass begin to change a little to a brown color, or when the seeds are approaching maturity. A greater quantity of nutriment is then contained, the hay is sweeter to the taste and is not so tough as otherwise, and the hay is more easily dried. Grass beaten down by rain, should, however, be cut before it becomes injured in this way while uncut.

A great defect in curing hay, and more especially clover, is drying it too much in the sun. The more improved practice is to dry it partially in the swath and finish by what is termed the *sweating* process, or drying in small cocks, the heat of a very slight fermentation assisting. The labor of spreading is thus saved, there is little injury from exposure to dew, and the thin leaves and succulent stalks become equally dried together. Where this plan has been tried, many successive days of rainy weather have not prevented the making of excellent hay: and indeed while the outside of the cock is wet by the falling rain the interior has been constantly drying by the slight heat generated. Every farmer should at least try this method, and every one who tries it fairly adopts it.

We still see, in many places, the common hand rake employed to collect the hay on the meadow. —This should be no longer tolerated. When it can be raked by a horse with one fifth the expense, it is surprising that so many adhere to the old practice. If farmers are unwilling to procure a revolving rake, let them at least provide themselves with the common horse rake. The cost is only two dollars, and it will pay for itself in less than half a day, and in half an hour, if a shower of rain is coming upon a crop of new hay. Attach the draught ropes to the other teeth cut to about one-third the length of others, and no difficulty will be found in managing it.

We last year saw a meadow of fifteen acres raked with a common horse rake in about six hours of time actually employed, a part of which yielded three tons to the acre, and the whole of the hay was drawn to the stack, chiefly from the winnow, by the horse and rake, sufficiently fast to keep a strong active man (who had previously laughed at the plan) hard at work all day to pitch it on the stack. By regulating properly, by means of the handles, the pitch of the teeth, loads were collected which were a load for one horse to draw. One man only (without any rider) was sufficient to manage it. It abridged the labor so much, that cutting the grass was more than two-thirds of the work done on the meadow. On extensive and smooth meadows, we would by all means recommend the revolving rake in preference to any other, and the hay sweep (described last year in the Farmer) to collect and draw it to the stack or place of deposit. But the common horse rake may be used on any meadow, if not intolerably rough.

Mowers should commence work by four o'clock in the morning, when the air is cool and the grass moist, and then they may rest in the heat of the day.

In harvesting grain, it is much better to cut it a few days before it is perfectly ripe, than to allow it to stand too long: If cut when not entirely ripe, and bound up *before the straw becomes dry, it will derive nourishment from the stalk* sufficient to ripen it before the sheaves become thoroughly dry.

The great advantages of cutting early rye, the grain is not wasted by shelling, the straw is worth more, and it enables the farmer to drive business and prevent losses from bad weather and other delays.

Lodged and rusty grain should in all cases be cut as soon as admissible, as little is gained by suffering it to stand long.

Whenever it is necessary to leave grain upon the field after it is cut, it should be put up so as to withstand any rain without injury. This may be easily effected by placing about six sheaves closely together, pressing their heads to a point, and capping the whole with a seventh. The cap is made by binding a sheaf firmly near the lower end and spreading the straw on all sides by breaking it down over the band.

At this busy season of the year, the garden must by no means be neglected—the ground must be kept clear from weeds, —plants which need it watered in dry weather, always in the evening to allow the water to penetrate the soil before evaporating; herbs, as they come in flower, must be cut and dried for future use; they must be cut in dry warm weather, and always dried in the shade—fruit trees which bear too thick must have their fruit thinned, if it is wished to have it of any value as to flavor. In the flower garden, seeds must be gathered, labelled, and preserved as they ripen, and the roots of bulbous plants taken up as the tops wither and die; they are best preserved by drying them somewhat, in small heaps covered with sand or dry soil to protect them from the rays of the sun. As soon as taken up they should be labelled to prevent mixing.

Exercise—At least two hours a day should be spent in the open air. When the weather is such as not to permit the delicate to go abroad, Mr. Abernethy advises the windows to be thrown open and exercise to be then taken by walking up and down the apartments of the house. Walking is the most natural and convenient exercise, and to the healthy and robust, perhaps the best. Riding on horseback, especially to the dyspeptic, and to those who are threatened with consumptive complaints, has been highly extolled by physicians, and with justice. Dr. Paris recommends digging in a garden as a useful and agreeable exercise. The best time for taking exercise is three or four hours after a meal, when digestion has been complete, when the nutritious chyle has entered the blood vessels, and when the body feels refreshed and invigorated.—*Economy of the human body.*

SAXON RAMS FOR SALE.

For sale, 4 full bred Saxon Rams, 3 to 4 years old—
Enquire of
EDWARD KENLY.
July 3 3t

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every Monday

	PER	FROM	TO
BEANS, white field,	bushel.	1 25	
CATTLE, on the hoof,	100lbs	8 50	9 00
CORN, yellow	bushel	72	73
White	"	69	70
COTTON, Virginia,	pound	9	11
North Carolina,	"	10	11
Upland,	"	9 1/2	11
Louisiana — Alabama	"	10	11
FEATHERS,	pound.	48	50
FLAXSEED,	bushel.	1 12	
FLOUR & MEAL—Best wh. wh't fam.	barrel.	10 00	
Do. do. baker's	"		
SuperHow. st. from stores	"	7 50	
Wagon price,	"	7 00	
City Mills, super	"	7 75	
extra	"	8 00	
Susquehanna,	"		
Rye,	"	4 50	
Kiln-dried Meal, in hhds.	hhd.	18 00	
do. in bbls.	bbl.	3 50	
GRASS SEEDS, wholes. red Clover,	bushel.		
Kentucky blue	"	2 50	3 00
Timothy (herds of the north)	"	2 25	2 50
Orchard,	"	2 00	2 50
Tall meadow Oat,	"		3 00
Herds, or red top,	"	1 00	1 25
HAY, in bulk,	ton.	10 00	15 00
HEMP, country, dew rotted,	pound.	6	7
water rotted,	"	7	
HOGS, on the hoof,	100lb.	7 00	
Slaughtered,	"		
HOPS—first sort,	pound.	9	
second,	"	7	
refuse,	"	5	
LINE,	bushel.	33	34
MUSTARD SEED, Domestic, —; blk.	"	3 50	4 00
OATS,	"	26	27
PEAS, red eye,	bushel.		1 12
Black eye,	"	1 00	1 12
Lady,	"		
PLASTER PARIS, in the stone, cargo,	ton.	3 62	
Ground,	barrel.	1 50	
PALMA CHRISTA BEAN,	bushel.		
RAGS,	pound.	3	4
RYE,	bushel.	75	85
Susquehanna,	"		none
TOBACCO, crop, common,	100lbs	3 50	4 50
brown and red,	"	4 00	6 00
fine red,	"	8 00	10 00
wrappery, suitable	"		
for segars,	"	10 00	20 00
yellow and red,	"	8 00	10 00
good yellow,	"	8 00	12 00
fine yellow,	"	12 00	16 00
Seconds, as in quality,	"		
ground leaf,	"		
Virginia,	"	4 50	6 00
Rappahannock,	"		
Kentucky,	"	5 00	8 00
WHEAT, white,	bushel.		
Red, best	"		1 60
Maryland inferior	"		1 55
WHISKEY, 1st pf. in bbls. } scarce	gallon.	33	33 1/2
in hhds. }	"	31	
wagon price,	bbls		
WAGON FREIGHTS, to Pittsburgh,	100 lbs	1 25	
To Wheeling,	"	1 50	
WOOL, Prime & Saxon Fleeces,	pound.	40 to 50	20 22
Full Merino,	"	35	40 18 20
Three fourths Merino,	"	30	35 18 20
One half do,	"	25	30 18 20
Common & one fourth Meri,	"	25	30 18 20
Pulled,	"	28	30 18 20

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,	barrel.		
BACON, hams, new, Balt. cured	pound.	13	13 1/2
Shoulders,	"	11 1/2	12
Middlings,	"	11 1/2	12
Assorted, country,	"	9 1/2	10
BUTTER, printed, in lbs. & half lbs.	"	20	25
Roll,	"		
CIDER,	barrel.		
CALVES, three to six weeks old	each.	5 00	6 00
Cows, new milch,	"	25 00	40 00
Dry,	"	12 00	15 00
CORN MEAL, for family use,	100lbs.	1 62	
CHOP RYE,	"	1 50	1 60
Eggs,	dozen.	12	
FISH, Shad, No. 1, Susquehanna,	barrel.	9 75 1/2	10 00
No. 2,	"	9 50	
Herrings, salted, No. 1,	"	4 25	4 75
Mackerel, No. 1, ———— No. 2	"		
No. 3,	"		
Cod, salted,	cwt.	3 00	3 25
LARD,	pound.	10	11

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

U. S. Bank,	par	VIRGINIA.
Branch at Baltimore,	do	Farmers Bank of Virgi. 1 1/2
Other Branches,	do	Bank of Virginia,
MARYLAND.		Branch at Fredericksburg,
Banks in Baltimore,	par	Petersburg,
Hagerstown,	do	Norfolk,
Frederick,	do	Winchester,
Westminster,	do	Lynchburg,
Farmers' Bank of Mary'd,	do	Danville,
Do. payable at Easton,	do	Bank of Valley, Winch. par
Salisbury, 1 per ct. dis.		Branch at Romney, ... par
Cumberland,	par	Do. Charlestown, par
Millington,	do	Do. Leesburg, ... 1 1/2
DISTRICT.		Wheeling Banks, ... 3 1/2 a 4
Washington,		Ohio Banks, generally 5 a 6
Georgetown, } Banks, 4 p.c.		New Jersey Banks gen. 3
Alexandria, }		New York City, par
PENNSYLVANIA.		New York State, do
Philadelphia,	par	Massachusetts, 1 1/2 a 2
Chambersburg,	1/2	Connecticut, 1 1/2 a 2
Gettysburg,	do	New Hampshire, ... 1 1/2 a 2
Pittsburg,	2 1/2	Maine, 1 1/2 a 2
York,	1/2	Rhode Island, 1 1/2 a 2
Other Pennsylvania Bks. 2		North Carolina, 5
Delaware [under \$5] 4		South Carolina, 6 a 7
Do. [over \$5] 1 1/2		Georgia, 8 a 10
Michigan Banks,	10	New Orleans, 8 a 10
Canadian do,	10	

FOR SALE,

Two superior DEVON bulls, 4 years old this spring, of the purest blood in the country. fine form and remarkably large. Any gentleman wishing to procure one will find it to his advantage to embrace the present opportunity, as they will be sold at the low price of \$100 each, deliverable in Baltimore.

Applications in writing, post paid, to be made to the subscriber.

EDWD. P. ROBERTS, Baltimore, Md.

may 29

31

FARMERS' REPOSITORY OF AGRICULTURAL IMPLEMENTS AND EAST MAN'S CYLINDRICAL STRAW CUTTERS IMPROVED.

THE Subscriber informs the public that he has secured by letters patent his late and very important improvements on his Cylindrical Straw Cutter, by which improvements they are made more durable and easier kept in order. All the machinery being secured to an iron frame the shrinkage, wear and decay of wood is avoided. The feeding part of his improved machine is upon an entire different principle from the former machine; far more durable, requiring neither skill or care to keep it in order. These machines are so constructed as to make the freight on them less than half what it cost to ship the former or wood machines, an important desideratum to purchasers living at a distance; and I now offer it to the public upon

the credit of my establishment as the most perfect machine in existence for the same purpose. They are also adapted to cutting rags for paper making, and for cutting tobacco as manufactured by Tobacconists, &c.

I also keep these machines on hand made as heretofore with my new feeding machinery attached to them; and also a general assortment of Agricultural Implements, as, usual. Elliott's Horizontal Wheat Fans, and Fox & Bolland's Threshing Machines are both superior articles.

My stock of Ploughs on hand are not equalled in this city either for quality, quantity, or variety. I have a large assortment of Plough Castings at retail or by the ton, and having an Iron Foundry attached to my establishment can furnish any kind of Plough or Machine Castings on reasonable terms and at a short notice.

All repairs done with punctuality and neatness. On hand, a few Patent Lime Spreaders, Horse Powers, &c. &c.

Also just received, a fresh supply of Landreth's superior Garden Seeds. In store, superior Timothy and Orchard Grass Seed and Seed Oats. All implements in the agricultural line will be furnished by the subscriber, as good and on as reasonable terms as can be had in this city, with a liberal deduction to wholesale purchasers. Likewise will receive orders for Fruit Trees from Mr. S. Reeves' Nursery, New Jersey.

JONATHAN S. EASTMAN,

Pratt street, Baltimore,

feb 20

Between Charles & Hanover sts

TO THE PUBLIC.

Try the New Agricultural Establishment in Grant-street, next door to Dinsmore and Kyle.

Every article warranted to be first rate. The subscribers, grateful for past favors, take this early opportunity of returning their thanks to their customers and the public in general, and beg leave to inform them that they are now provided with a very extensive stock of newly manufactured AGRICULTURAL IMPLEMENTS, suitable to meet the call of Farmers, Gardeners, Merchants, Captains of vessels, and others, viz: 1000 Ploughs, assorted sizes, from \$4 to \$15 each, comprising of the old common Bar Shear, Winand's Self Sharpener; Woods & Freeborn's patent, all sizes, "Davis", "Sinclair & Moore's" improved Hill Side Ploughs, highly esteemed for turning the furrow down hill, with wrought or cast shears; Wheat Fans, of various sizes and patterns, from \$15 to \$50 each, warranted to separate the garlic from the wheat; Corn Shellers, from \$12 to \$20; Cutting Boxes, from \$7 to \$50 each; Corn and Tobacco Cultivators, large and small; Expanding do., Wheat Cradles, warranted to have fingers of the natural growth, and Grass Scythes, &c. &c.; Castings, of all descriptions and patterns, by the lb. or ton, to suit customers, allowing a liberal discount to merchants buying to sell again—all of which will be furnished on the most pleasing terms; and every article warranted to be of the best quality, in proportion to the cost price. All orders by mail or otherwise shall be duly attended to with the greatest despatch.

We would particularly call the attention of Country Merchants and others, wishing to purchase agricultural implements to sell again, to the fact, that we will furnish them with articles on better terms than they can be supplied at any other establishment in the city. Our assortment is complete and as varied as that of the most extensive concern in Baltimore.

We have also connected in its operations with the above branch of business a complete assortment of FIELD AND GARDEN SEEDS, kept by Thomas Denny—Also Garden and Farm Tools, of various sorts and of the choicest collection, which will enable our customers to have filled entire all orders in the Agricultural and Seed Departments. mh 26 JOHN T. DURDING & Co.

GROUNDED PLASTER OF PARIS.

Of superior quality, in bbls. on hand and for sale by

JONA. ELLICOTT & SONS,

may 8 3t

south end of Patterson st.

CONTENTS OF THIS NUMBER.

Notice of a communication by Powhatan—do. of an essay on marl—succoring Dutton corn—buckwheat—turnips—corn—briars—hay—meadows—weeds—test of good flour—the crops—curing of hay—managing a horse—prevention of lice on fowls—tobacco crop of Tennessee—virtues of marl tested—communication of Powhatan on the chinch-bug, &c.—butter-making—singing conducive to health—stall feeding cattle—blight in pear trees—geological survey of Maryland, concluded—brief hints for the sea son—exercise—prices current—advertisements.

MORUS MULTICAULIS TREES.

The subscriber has from 25,000, to 30,000 Morus Multicaulis trees now growing at his residence, with roots of 1, 2, and 3 years old, which will be ready for sale this all, and which he will sell on moderate terms

EDWARD P. ROBERTS.

THE FARMER & GARDENER

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, E. P. ROBERTS AND SAMUEL SANDS—EDITED BY E. P. ROBERTS.

No. 12.

BALTIMORE, MD. JULY 17, 1838.

Vol. V.

THIS publication is the successor of the late **AMERICAN FARMER**, and is published at the office, at the N. W. corner of Baltimore and North streets, over the Patriot office, at two DOLLARS AND FIFTY CENTS per annum, if paid within one month from the time of subscribing, or \$3 if after that time. All letters to be post paid.

BALTIMORE: TUESDAY, JULY 17, 1838.

We paid a visit some days since, to Mr. David Stuart, at his country seat on the Bel-Air road, about six miles from Baltimore, and were most agreeably surprised to find that in the very few years he has had it in possession he had carried its improvement far beyond our anticipations.—We saw a field of 20 acres, which, about four or five years since was in the occupancy of poverty and other kindred grasses, but which was, at the period of our visit, bearing one of the best crops of wheat we have seen for several years, and if we are not greatly at fault in our estimate, we think it will yield 25 bushels to the acre. This field, we learn, had been chiefly brought up to its present state of fertility by deep ploughing and turning in clover; the soil, as is that of the farm generally, is what is called a chocolate clay, by no means remarkable for its virgin strength. The defects of nature, however, have been overcome by Mr. Stuart; for in all the fields through which we passed, whether of corn, oats, wheat, grass or truck, the evidence of an enlightened enterprise and well directed zeal were present.

The improvements on Mr. Stuart's farm combine the happy qualities of neatness, comfort and convenience. His dwelling is delightfully situated on an eminence, so elevated as to command a view of the Chesapeake Bay and Eastern Shore; the stabling, barn, cow houses and piggery, are each admirably adapted to the purposes for which they are intended.

Mr. Stuart has a boiler of a hundred gallons capacity, in which he cooks his feed for his hogs and milch cows. It is simply a large pot holding 100 gallons, set in brick work so as to confine the fire around it. In this, at times, he has prepared the food for from 50 to 60 hogs, and from ten to twelve cows, at an expense and trouble that is not felt as a burthen.

But while we do justice to Mr. Stuart, and give

him credit for having transformed worn-out fields into those of productiveness—for having substituted luxuriant artificial grasses for sedge—we must not omit to mention that the hospitalities of his house are greatly enhanced in value, and derive more than a moiety of their charms from his lady, whose bland and courteous deportment—whose kind attentions—make one almost forget that he is a visitor.

After the change which Mr. S. has wrought in the texture and productive capacity of his farm, let no one despair of meliorating the condition of his own. *Lime, ashes, plaster, clover, deep ploughing*, and a judicious rotation of crops, will bring up the most exhausted soils, and make them better than they ever were.

IMPORTATIONS OF SILK.

We were indebted a few days since to our representative, John P. Kennedy, Esq. for the Annual Report of the Secretary of the Treasury, on the Commerce and Navigation of the United States, from which we have extracted the following facts connected with the importation of Silk goods.

It appears that from the 1st of October 1836, to the 30th September 1837, there were imported into the United States, of

Manufactured Silk goods,	\$14,213,773
Raw Silk, - - - - -	211,694
Sewing Silk, - - - - -	707,597
	\$15,133,064

Besides the above, there were imported \$1,810,947 worth of goods manufactured from silk and worsted, making an aggregate of \$16,944,011.

Spring Wheat.—We saw a few days since two samples of Spring Wheat grown by Mr. Giles of Baltimore County. The one was sown on the 2d of April, and the other on the 1st of May. The heads of both were remarkably long and well filled, the last sown the largest. Mr. Giles assured us that each stood thick on the field, was about 3½ feet high, and presented a most healthy appearance, being exempt from all the diseases incident to growing wheat.

BLIGHT IN GRAPES.

We would especially call the attention of our readers to the subjoined communication, and solicit communications thereon:

To the Editor of the Farmer and Gardener:—

Will the Editor of the Farmer and Gardener oblige a subscriber by enquiring of his correspondents, the cause, and the remedy, for the blight or rot, in the American grapes, such as the Isabella, Catawba, and Alexander. On the 1st inst. not one defective grape could be found on the vines, though by the 7th, fully one half of a large crop were blighted. It is the same case every season. Deep planting has been suggested as a *prevention*, but the present object is to enquire if there is any *remedy* for vines of 5 or 6 years growth.

7th July, 1838.

[From the London Sportsman.]

HINTS FOR PREVENTION OF DISORDERS IN HORSES.

STABLES.

Stables should be lofty, light and airy, and should never contain more than six or eight horses. They are in general kept too close and hot.

Too much clothing also is usually put upon the horses, which thus become so tender, that they catch cold upon every slight exposure to a cool air.

The doors and windows of stables should be thrown open when the horses are out, but care must be taken that a cold current of air does not immediately blow upon them when in the stable, particularly if they are heated.

It is a bad practice to allow horses to stand upon litter in the day-time, except they are unwell or fatigued.

FOOD.

The quantity and quality of a horse's food should invariably be regulated by the exercise and fatigue he has to undergo; high feeding, without proportionate work, produces half the disorders to which horses are subject.

Good hay is of much consequence to horses engaged in active exercises; but it should be given in small quantities during the day; and when owing to bad weather, the horses cannot be exercised, they should be stinted both in their hay and corn; and a bundle or two of clean wheat straw may be put before them. All grain given to horses, would be more nutritive if bruised in a mill, and mixed occasionally with chopt straw. Carrots are a most wholesome food, and of all roots, rank next to corn in point of nourishment. They are particularly serviceable when a horse's wind is affected.

When horses are first taken from grass, they

should be gradually brought to a dry diet by giving them carrots, lucerne, bran-mashes, &c., with their hay. After a few days a small quantity of oats may be given, and the feed increased by degrees till they come to their full allowance.—They should likewise be put into a cool stable, and have plenty of walking exercise. If such precautions were well attended to a great saving might be made, both of physic and the horse's constitution.

WATER.

Pond water, if it lay on a clay bottom, and be sweet, agrees best with horses; hard water may be improved by throwing some chalk or clay into it, and exposing it in cisterns to the open air.

It is proper to let the water, intended for the horses, stand for some hours in the stables before it is used.

Water should be offered to horses frequently; they would then never drink large quantities of it at a time, which is particularly hurtful to them when heated by exercise. It is a good and safe plan when travelling, &c., always to mix hot water enough with their cold to take off the chill.

EXERCISE.

A horse's exercise should be proportioned to his strength, manner of feeding, and the labor required of him. He ought, however, to have at least two hours of daily exercise.

Horses should not be ridden fast after having been newly fed and watered. A fat horse requires a long course of moderate exercise before he can safely be put to trot, which is violent.

It should be a general rule to ride a horse slowly at the beginning of a stage; afterwards increase the pace, and slacken it again a mile or two before the end of it, so as to bring him tolerably cool into the stable.

If horses come in very warm, they should be walked about gradually till cool, their feet should then be pricked, and all dirt and gravel carefully washed out. In hot weather, washing their legs is proper, but they should always be well rubbed afterwards. In winter, cold water is injurious to the heels, and apt to bring on swelling and the grease.

Horses should on no account be permitted to stand uncovered in the stable, much less at the stable doors after being much heated, except the weather be very warm. Road horses should in the middle of a long stage have half a pail of water mixed with a little oatmeal: and on a journey, if no other corn but what is soft and new can be procured, oatmeal just moistened with water, or some coarse bread, should be given in preference to such corn, which is extremely unwholesome. If a horse grow costive, let him have some mash of scalded bran or malt. If he have any difficulty in staling only, an ounce of nitre may be given in his food for a few nights.

Should he be seized with a violent fit of the gripes, let him be bled, back-raked, and have a clyster of three or four quarts of water gruel mixed with eight ounces of glauber or common salt.

The best instrument for giving a clyster is an ox bladder, that will hold two or three quarts, tied to the end of a wooden pipe about 14 inches long, one inch and a half diameter where the bag

is tied, and of a gradual taper to the extremity; where the thickness should suddenly increase, and be rounded off at the point, and made as smooth as possible. The hole through the pipe may be made sufficiently large to admit the end of a common funnel for pouring the liquor into the bag; no other force is requisite to throw it up, than the holding the bag a little higher than the level of the pipe. If in consequence of violent inflammation and pain, an opiate should be necessary, a tablespoonful of laudanum may be given in a pint of water.

Should a horse be touched in his wind, be very careful that he has only moderate quantities of food and water. Two spoonfuls of tar mixed with the yolk of an egg given in a morning fasting will be of great service to him when travelling.—In hot dry weather, it is useful to stop horses' feet at night with a mixture of soft clay and cow dung, and to moisten them frequently with water.

FRICTION.

The currying, brushing, and rubbing down horses is of great importance, not only to their coats, but also to their general health; when these operations are neglected, or slightly performed, an obstruction takes place in the pores of the skin, producing mange, &c., and the hair instead of being smooth and shining, stares, and stands on end. Nothing tends so much to prevent grease and swelling of the legs as frequent hard rubbing and carefully cleaning the heels.

TRIMMING.

The ears of horses are covered with a short down in the inside, mixed with larger hairs, to prevent cold air, rain, dust and flies from hurting the internal ear. The trimming therefore this part, is very prejudicial to the horse.

PHYSIC.

It is advisable to prepare a horse for physic by giving him bran mash for a day or two.

The morning is the best time for giving a purgative, the horse having previously fasted for two or three hours; during this day, he is to be kept in the stable, and fed with bran mash, and a very moderate quantity of hay. He may be allowed to drink plentifully of warm water, and if he refuses it warm, let the chill only just be taken off. On the following morning he is to be gently exercised, when the medicine will generally begin to operate, and he is to be plentifully supplied with bran mash and warm water. Warm clothing, particularly when he is out of the stable, is highly necessary.

On the next day the purging will generally have ceased; then a small quantity of corn may be allowed.

When physic does not operate at the usual time, the horse appearing sick and griped, relief may be had by giving a clyster of water gruel and making him drink freely of warm water, which should be assisted by exercise.

When purging balls are given to horses the head should be kept up, and care taken that the balls pass down the gullet, which may easily be discovered sliding down from the outside.

Mr. Clarke advises a bran mash to be given an hour before the physic.

The following formulæ are chiefly taken from White's Farriery.

PURGING BALLS—NO. 1.

Succotrine Aloes,	-	-	-	7 dr.
Prepared Natron,	-	-	-	2 dr.
Ginger powdered,	-	-	-	1 dr.
Oil of Carraways,	-	-	-	10 drops.

Syrup of Buckthorn enough to make the ball.

This dose is sufficient for a strong horse. For a weak or small horse 6 drams of Succotrine Aloes would be sufficient.

No. 2.

Succotrine Aloes,	-	-	-	1 oz.
Cream of Tartar,	-	-	-	4 dr.
Ginger powdered,	-	-	-	2 dr.

Syrup of Buckthorn to form the ball.

POULTICE.

Take of fine bran one quart, pour on it a sufficient quantity of boiling water to make a thin paste, and linseed powder enough to give it a proper consistence.

DIURETIC BALLS.

Castile Soap,	-	-	-	4 oz.
Powdered Rosin and Nitre,	-	-	-	2 oz.
Oil of Juniper,	-	-	-	$\frac{1}{2}$ oz.

Linseed powder and syrup enough to give it a proper consistence. To be divided into six balls for strong, and eight for delicate horses.

Diuretic Balls should be taken at night and worked off the next morning, allowing the horse plenty of water.

ALTERATIVE POWDERS.

An ounce of Nitre mixed with a quarter of an ounce of Sulphur given morning and night for a fortnight or three weeks is a safe and useful alterative.

ASTRINGENT OINTMENT FOR THE GREASE.

Hogs Lard,	-	-	-	4 oz.
Oil of Turpentine,	-	-	-	2 dr.
Acetated Water of Litharge,	-	-	-	$\frac{1}{2}$ oz.

PARIS, Ia., May 18th, 1838.

To the Editors of the Indiana Farmer:

Sirs—I have to acknowledge the receipt of one of your papers, in which I found much valuable information. My business has been very pressing, for some time past, and I have not found time for any communication; but as I deem it a high privilege to receive information from others, I conclude that it is a duty we owe to each other, to impart, as well as to receive; in drawing this conclusion, I thought I would send you the following:—

If there has been none of the kind, perhaps it may be of some use to the fruit growers of the State. I shall confine my remarks more particularly, to apples and peaches. By experience for many years, I have found an effectual remedy against the destruction of those valuable Fruit Trees, which are so frequently much injured, and many times totally destroyed by that devouring insect, called the Caterpillar-worm. Every fruit-grower and almost every other person, has seen the effect of those devouring worms. In order, therefore to disclose the remedy I must begin with the worms in the eggs, and as there are but few persons that I have ever found who know where to look for the eggs, I thought a communication might be of use to the public.

The eggs (or rather the young worms) of the worm are to be found in the winter, in the comb, like that of a Honey Bee, placed by the old worm before she dies, near the extremity of the limbs, say within from six to fifteen inches of the end of the limb, where it is about as large as a pipe stem, or say the diameter of the limb about the length of a barley corn, or a quarter of an inch. There the comb is placed about half round the limb, and about three-fourths of an inch long, with the cups of the comb, the ends of which are placed to, and from the limb, the outside being glossed over with a brown shining substance, which the rain will not penetrate, the cups are nearly the eighth of an inch in length, and not larger than a very fine needle, from which the young worm comes forth, as soon as the leaves begin to grow in the spring. These nests can all be destroyed by close examination in the winter, or early in the spring, or by careful attention as soon as they begin to build their nests. Wherever that is done, there will be no worms on the tree for that season. The suffering of Cherry Trees to grow in an orchard is very prejudicial, they produce such a quantity of worms. By destroying the worms as above described, in a few years there will be none left in an orchard—There is not one nest in my orchard now that I know of. If I should find one, I should be very sure not to pass by it, without destroying it. Another effectual remedy is produced by the destruction of Caterpillar worms as above directed. In so doing, the fruit is preserved from the Maggot worm, as there are no old nests for them to breed in. The Maggot worm, I am fully persuaded, breeds in the old nests of the Caterpillar worm; I very well recollect one year while I lived in the eastern country, my apples were good and fair, with but very few worms in the whole crop of apples, while the orchards generally in the country were much infested with the Caterpillar worm, and the apples so filled with the Maggot worms, that many would not make their apples into cider, but fed them to their hogs, and let them rot on the ground.

I will devote to another subject a few lines and close this communication. In my other letter on the culture of wheat, I was not as full as I wished afterwards I had have been. There is another method of raising wheat that I did not mention, that is, when the wheat is sown, sow on plenty of Red Clover Seed, it will come up when the wheat does, and get root before winter sets in, and the next season will get ripe by the time the wheat does. When the wheat is off, turn it under, and sow wheat again, and the clover being ripe, will seed the ground again, as well as make a good coat of manure. In thus proceeding year after year, the ground will grow more rich, and the crop will increase each year, if there is proper attention paid to the purity of the seed, and how long the crop would increase I know not. It was practised at the east to great advantage.

I have the honor to be,

Your obedient servant,

W. D. BACON.

From the Farmer's Cabinet.

BUTTER MADE FROM FOUR COWS.

Great credit is due to numbers of enterprising individuals who have at different periods introdu-

ced from abroad improved breeds of cattle; particularly the improved Durham or Short Horn stock so valuable for taking on fat readily; but it has long been the opinion of many of the best farmers in this country, that the best specimens of our native cows are equal, if not superior, to the improved stock, for milk or butter.

Being recently on a visit to Cyrus Cadwallader, Esq. of Bucks co., Pa., he showed me a statement of the quantity of butter made from four native cows last season; commencing 4th mo. 25th, 1837, and ending with the season. They were pastured in the usual manner, and not otherwise fed, and there was made from the four cows 740 pounds of butter. I thought this statement, which can be implicitly relied upon, might be usefully published in the Cabinet, in order that comparisons might be made with others who keep dairies, who I hope will furnish for publication the results of their observations on the quantity of butter made by their cows.

R.

ON CULTURE OF TROPICAL PLANTS.

We are indebted to the politeness of Dr. PER-
RINE for the opportunity of publishing another interesting letter from General DEARBORN on the subject of the introduction of new articles of agriculture and horticulture in the United States:

HAWTHORN COTTAGE, }
ROXBURY, JUNE 28, 1838. }

DEAR SIR: Your two letters, and the samples of the foliaceous fibres of the precious tropical plants which you are desirous of introducing into Florida, have been received. I am extremely obliged to you for this kind attention, and very happy to learn that the letter to my estimable friend, Governor LINCOLN, afforded you any satisfaction. It was but the expression of my gratitude for the highly commendable efforts you were making to subserve the interest of your country, by furnishing a new source of profit to the agricultural and manufacturing industry of the United States; for every raw material produced, even in the extreme SOUTH, is a direct benefit to the mechanical and commercial enterprise of the NORTH.

I am fully sensible of the difficulties you have been compelled to encounter in your laudable endeavors, and how laborious and discouraging is the position of a gentleman who has a favorite and important object to accomplish, which requires the generous co-operation of the National Government, and especially if it is of a novel character. The momentous subjects before Congress, growing out of our domestic and foreign relations, have been of such an all-engrossing character as to require immediate action, and have not left the members at leisure to attend to less pressing matters. Besides, there are but comparatively so few persons who take an interest in political economy, scientific inquiries, or any measure which demands much research, that an utter indifference to them too generally exists in the whole community; and it is not until more complete and exact knowledge is obtained, that the same zeal and promptness of action is induced, as when the end to be attained is obvious, and universally approved, from the evident advantages which are to follow.

As important as is the agriculture of our country, it has received but little patronage, encouragement, or attention from the Government. The first, the

greatest, the most vital of all the branches of national prosperity, from some inexplicable cause, has been left almost entirely to individual exertion. Such neglect is, to say the least, wonderful, when nearly all our exports, and the very means of our subsistence, are the products of the soil. But it is an humble, unobtrusive, quiet, and peaceful occupation, and has no ardent advocates to urge its claims for protection and advancement. It will, however, be of more moment as we advance in population and intelligence.

Be not discouraged, therefore, for facts and truths are mighty in their operations, and will ultimately triumph over all impediments. Columbus was, for years, a petitioner to no less than three sovereigns, and on the point of appealing to the bounty and energy of a fourth, before his gigantic conception of the existence of a "new world" was credited, and his voyage of discovery undertaken.

Newton's theory of gravitation was not adopted, even by the Academicians of France, until forty years after the publication of his Principia; and Galileo was obliged to confess before the assembled authorities of the Romish churches "that the earth did not turn round on its axis." Still that venerable philosopher did not despair, but, as he arose from his humble position, and brushed the dust from his knees, whispered to a friend, "nevertheless the earth does revolve," and his belief has become universal, although the pontifical decree, denouncing it as a heresy, remains unrepealed. The value and importance of the experiment you contemplate making is so great to the whole Republic, that it is impossible that it shall not be undertaken, when the subject shall be fully understood in all its vast scope and bearing, and by an almost unanimous voice. The citizens of the United States are, at times, difficult to be excited, but when the course is made clear, and the anticipated result of momentous import, they evince an ardor and an energy which sweeps like a flood over every obstacle, and there is no relaxation until the work has been consummated. How long were roads, canals, and railways urged upon the attention of the State and National Legislatures before they obtained any favor? And, at last, indignant at the slow movements and parsimonious policy of their Governments, the People came forth in their strength; and behold the glorious consequences! Prove that a thing is *true* and *useful*, and it will be adopted. Let the pioneer of improvement enlighten the route he has taken with the flambeau of intelligence, and his followers will be as numerous as the object to be accomplished demands.

One of the kinds of fibres you sent me, that of the forest pineapple, (*Bromelia pita*), is of a remarkable flossy and delicate character, and, I should think, would make as beautiful and excellent thread as the most perfectly prepared flax or the filaments of the silk-worm.

The value of the culture of the *Agave Sisalana*, from which is obtained the Sisal hemp of commerce, may be conceived from the following facts, which I have taken some pains to ascertain, since the receipt of your first letter, as it is a substitute for the Manilla hemp. [The fibre of the petiole of a species of banana.]

Cordage, made of Manilla hemp, is now preferred for the running rigging and hawsers of the vessels employed in the fisheries, coasting and foreign trade, as well as all the steamboats on the

lakes and Western waters; it being as durable as hempen cordage, and much lighter—the weight being, for ropes of like size and length, nearly as eight to ten. The whalemen, in the five hundred ships engaged in that adventurous navigation, have given it a thorough trial, and, from its buoyancy, it is universally used for their immensely long tow lines, employed in the perilous capture of the leviathans of the deep.

All the Sisal hemp which can be procured is manufactured, and makes quite as good cordage, for most purposes, as the Manilla; but the fibre not being quite as flexible, owing, probably, to the less perfect manner of preparing it, the price is a little lower. For the last three years, the Manilla hemp has been from 7 to 7½ cents per pound, and Sisal from 6 to 6½ and 7.

The quantity of Manilla hemp imported into the United States during the last year is estimated by a manufacturer of cordage who lives in this town, at 28,000 bales, each weighing 270 pounds, the cost of which, at 7½ cents, amounts to 567,000 dollars.

The above mentioned manufacturer has invented machinery, which he has in full operation, for spinning Manilla hemp, and has also made cordage from the Sisal, with the same apparatus; and there is another large factory in Boston, in which the process of spinning was invented by Professor Treadwell, of Harvard University. The latter works are driven by water, and the former by steam power.

There are two rope-walks in this town which manufacture into cordage, of Manilla hemp,

	3000 bales
One in Boston	1200 "
Five in Charlestown and Cambridge	1000 "
Five in Salem and Marblehead	3200 "
One in Hingham	200 "
Two in Plymouth	1400 "

10,000 "

In the other New England states, 5,000 "

In New-York, Philadelphia, Baltimore, and other places, 13,000 "

Total quantity in the United States 28,000 "

With the best wishes for your success in obtaining the generous patronage of Congress, and for your prosperous prosecution of an experiment in Florida, I offer assurances of my unfeigned respect.

Your most obedient servant,

H. A. S. DEARBORN.

Dr. HENRY PERRINE.

[From the Cincinnati Gazette of July 2]

GREAT SALE OF DURHAM CATTLE.

Mr. C. S. Clarkson has furnished us with an account of his large sale of Durham Cattle. The prices paid fully meet his expectations. Mina and calf Colossus sold for \$1700; and were subsequently re-purchased by Mr. C. at an advanced price, he having reserved no bid at the sale.—Lilly of the Valley was also purchased by him. Below we give a list of the prices paid.

COWS AND CALVES.

Mina, 6 years old, roan cow, imported,	\$975
Octavia, 4 years, pied red and white,	725
Pennsylvania and calf, roan cow, 7 years,	735

Lady Roan, 7 years, (resold for \$800)	750
Snow Drop and calf, white cow, 4 years,	800
Florida and calf, 4 weeks old,	1075
Belinda, pied heifer, 2 years old,	875
Kitty Clover, 7 years old,	700
Prudence, 7 years old,	570
Emma & cf, roan cow, 3 yrs. resold at an adv.	850
Hyacinth, 12 years, private sale,	1000
Pink, 1 year, red and white heifer,	780
Rosebud, 1 year, red and white heifer,	850
White Rose, 1 yr, white with a few yel. spots	800
Dahlia, 11 months, white heifer,	475
Lilly of the Valley, 11 mos, roan heifer,	400
Susan, roan heifer, 1 year,	550
Stell, red and white heifer, 7 mos.	410
Daisy and calf, red cow,	469
Speckled Daisy, speckled cow, 4 years old,	400
Beauty and calf, red and white heifer, 3 years	200
Primrose, red and white heifer, 2 years,	220
Speckled Durham, roan cow, 8 years,	300
Dutchess, red cow, white spots, 6 years,	300
Blossom and calf, red cow, white spots, 3 yrs	370
Myrtle, pied and white heifer, 1 year,	320
Juliet, red & white heifer, 2 yrs. mix. blood	100
Laura, roan calf, 9 months,	220
Venus, red and white, 9 years, half blood	150
Young Venus, red and white cow, 4 years,	185
Matilda, 2 years, mixed blood,	200
Flora, 7-8 roan cow,	225
Cornelia, 2 years, roan heifer, mixed blood,	175
White Lily, 11 mos. mixed blood,	330
Nora and calf, deep red cow, mixed blood,	120
Caroline, deep red heifer, 2 years, part blood,	165
Ruby, roan heifer, 1 year old,	225
Cherry, red cow, 7 years old,	135
Mulberry and calf, red heifer, 2 years,	240
Speckled Legs and calf, 2 years	150
Old Kentuck and calf,	135
Clara and calf, red and white, 3 years,	160
Cora, red and white heifer, 1 year,	95
Lucy, mixed blood, 3 years,	170
Harriet and calf, mixed blood;	180
Maria, yearling, mixed blood,	110
Spot, 4 years, half blood, good milker,	200
Florinda and calf, mixed blood,	205
Mayflower and calf, yearling heifer,	455
Fanny Wright, 7 months old,	145
Lady of the Lake,	120

BULLS.

Ohio, white bull 3 years old,	\$150
Proclamation, red bull, white spots, 6 yrs.	600
Texas, 2 years old, white bull,	710
Colossus, white, 8 months old,	725
Col. Crockett, 1 year, red and white,	575
Don Juan, 1 year, red,	130
President, red and white spotted, 11 months,	190
Cato, roan, 11 months old,	300
Duke,	120
Frederick, bull calf, roan, 9 months old,	1000

Making Butter.—Putting a pint of cold water during the summer months in each pan of milk when strained from the cow, will materially aid in these desirable objects. The milk will not sour as quick, and the cream will rise more perfectly. The reason why butter becomes rancid so soon, is owing to the imperfect manner in which the milk, frequently soured before churning, is separated from the butter. Retarding the souring of the milk by the application of cold water, obviates the difficulty.

From the Southern Agriculturist.

PROGNOSTICS OF THE WEATHER.

Mr. Editor,—The subjoined prognostics of the weather have been taken from authors of approved experience, and in some instances of much learning. Not many, indeed none of their works have as I believe, been republished in this country, for the editions from which I have drawn my information, are English.* This last conviction induces me to send you this article, which I had compiled for my own use. The space allotted prohibits me from giving the causes of the respective prognostics—in each instance, however, the prognostic can be explained by the law of nature.

I. SIGNS FROM VAPORS OR MISTS.

1. If a white mist in an evening or night spread over a meadow, wherein there is a river, it promises the next day to be bright.
2. When the mist hanging over the lower lands draws towards the hills of a morning, and rolls up their sides until the tops be covered, there will be no rain.
3. In some places, if the mist hangs upon the hills, and drags along the wood, instead of over-spreading the lower grounds, in a morning, it will turn to rain.
4. If mists rise in low grounds, and soon vanish, fair weather.
5. If they rise to the hill tops, rain in a day or two. (One of Mr. Worlidge's rules.)
6. A general mist before the sun rises near the full moon; fine weather.

II. FROM CLOUDS.

1. It is a symptom of fair weather when clouds dissolve into air: otherwise when they are collected out of the air.
2. When heavy rains are about to fall, every cloud rises bigger than the former, and all the clouds are in a growing state.
3. When clouds are fleecy, deep, and dense towards the middle, and very white at the edges, with the sky very bright and blue about them, they are of a frosty coldness, and will soon fall either in hail, snow, or hasty showers of rain.
4. When clouds breed high in the air in thin white trains, like locks of wool or the tails of horses, there will soon be wind below, and probably a rain with it.
5. When clouds as they come forward seem to diverge from a point in the horizon, a wind may be expected from that quarter, or the opposite.
6. When a general cloudiness covers the sky above, and small black fragments of clouds, like smoke, fly underneath, rain is not far off, and it will probably be lasting.
7. No surer sign of rain than two different currents of clouds, especially if the undermost flies fast before the wind: and if two such appear in hot summer, a thunder storm is gathering.
8. Clouds like large rocks; great showers.
9. If small clouds increase, much rain.
10. If large clouds decrease; fair weather.
11. In summer, when the wind has been South two or three days, and it grows very hot, and clouds rise with white tops, like towers, as if one were on the top of another, joined together with black on the nether side, there will be thunder and rain suddenly.

*Lord Bacon, Beat, the Shepherd of Banbury, Worlidge and Claridge.

12. If two such clouds, rise one on either hand, rain.

13. Dappled white clouds, (called a mackerel sky) generally predict rain.

14. Small black clouds of a clear evening, undoubted signs of rain.

15. Blue or black clouds near the sun any time of the day, or near the moon by night; signs of rain.

16. Small waterish clouds on the tops of hills; rain.

17. If clouds grow or appear suddenly, the air otherwise free from clouds, tempests at hand, especially if they appear to the South or West.

18. Clouds setting on the tops of mountains; hard weather.

III. DEWS.

Dew plentifully on the grass after a fair day, foretels the next day fair; but if after such a day no dew is on the ground, and no wind stirring, rain may be expected.

IV. FROM SKIES.

1. Between a red evening and grey morning, is commonly a heavy dew or a mist over the ground, but if a red morning succeeds, there is no dew.

2. When a lowering redness spreads too far upwards from the horizon in the morning or evening, rain or winds follow, and often both.

3. When such a redness, together with a raggedness of the clouds, extends towards the zenith in the evening, the wind will be high from the West or South-West, with rain.

4. When the sky in a rainy season is tinged with a seagreen color, when it ought to be blue, the rain will continue and increase.

5. If it is of a deep dead blue, the weather will be showery.

6. A dark thick sky, lasting for sometime, either without sun or rain, always becomes fair; then foul—that is, a clear sky before rain.

V. FROM SUN.

1. When the air is hazy, and sun's light fades by degrees, and his orb looks whitish and ill defined, one of the most certain signs of rain.

2. If the rays of the sun breaking through the clouds, irradiate and are visible in the air, rain soon.

3. White at his setting; bad weather.

4. Shorn of his rays; bad weather.

5. Going down into a bank of clouds which lie in the horizon; bad weather.

6. If he rise red and fiery, wind and rain.

7. If he rise cloudy, and clouds decrease, certain fair weather.

VI. FROM MOON.

1. When moon and stars grow dim, with a hazy air and ring or halo around it; rain follows.

2. If moon appear pale and dim, expect rain.

3. If red, a sign of wind.

4. If of its natural color, and the sky clear; fair weather.

5. If the moon is rainy throughout her course, it will clear up at the ensuing change, and the rain will probably commence in a few days after, and continue; if, on the contrary, the moon has been fair throughout, and it rains at the change, the fair weather will probably be restored about the fourth or fifth day of the moon, and continue as before.

6. If new moon does not appear till the fourth day, a troubled air for the whole month.

7. If the moon, either at her first appearance, or within a few days after, has her lower horn obscure, or dusky, or any wise sullied, it denotes foul weather before the full.

8. If discolored in the middle, storms are to be expected about the full, or about the wane, if her upper horn is affected in like manner.

9. When on her fourth day she appears spotless, her horns unblunted, and neither flat nor quite erect, but betwixt both, it promises fair the greatest part of the month.

10. An erect moon is generally threatening and unfavorable, but particularly denotes wind; though if she appear with short and blunted horns, rain may rather be expected.

(To be continued.)

COLUMBIAN HORTICULTURAL SOCIETY.

At the regular meeting of this Society, held on Saturday, the 7th instant, the following articles were exhibited:

By Mr. Wm. Buist—Cactus speciosissimus, gloxinia speciosa, speciosa alba, and grandiflora, very fine plants in a growing state, and the following cut roses:

Noisettes, Joane Deprez, Perpetual Bourbon, Maria Leonida, Madame Deprez, Lawrence, Ami Vebert, Cherce, Yellow, Chine, Belle Chinois, Duchy de Berri, Montezuma, Bellota, Hybrids, Monthly Cabbage, Phlox Drumondii, Hoya Carnosa.

All these flowers were very fine: the Phlox and Roses will prove great acquisitions to our gardens.

The Hon. J. R. Poinsett presented a collection of flower seeds, mostly annuals, which will be more fully noticed at the next meeting.

Dr. Mc Williams presented a collection of bulbs and seeds from Florida and Texas, among them the arrowroot or conti of the Seminoles; these seeds and roots were collected and forwarded by Dr. McCormick, of the United States Army.

From Georgetown College a beautiful specimen of Zephyranthes grandiflora, a new species of lily, probably the finest that ever flowered in this vicinity.

By Josh. Peirce, two specimens of the "black nun" dahlia, a seedling originating with, and so called by, him; a fine dark flower, equal to the "negro boy."

Mr. Callan presented a fine specimen of spring wheat from the Washington Asylum, sown in April, the heads of which measured six inches in length.

After the transaction of some private business, the Society adjourned to the 21st instant.

From the Cultivator.

HINTS FOR JULY.

From a belief of its utility, confirmed by several years' practice, we earnestly recommend a trial to those who have not adopted the practice, of curing their clover hay and such as abounds in clover, in grass cocks, instead of spreading and curing it in the old way. It will save labor, save hay, and add much to the value of that which is housed. As soon as the grass has become wilted

in the swath, and external moisture evaporated, and by all means before any of the leaves become dry and crumble, put the grass in grass cocks, as small at the base as possible, not to exceed a yard in diameter, and taper them off by adding forkfuls, to the apex, which may be four or five feet from the ground. Leaves them undisturbed at least 48 hours, and until you are pretty certain of sun or a drying wind; then open the cocks, and if once turned, the curing will be complete in three or four hours, scarcely a leaf will be wasted, and the hay will be bright, fragrant, and will keep well.

Cut small grain before it becomes dead ripe—for the following reasons: 1. If omitted, bad weather may intervene and delay the harvest too long. 2. Dead ripe grain wastes much in harvesting. 3. Early cut grain makes the best flour. 4. When any portion of the clum or straw has ripened, or become dry, there is no further supply of nourishment from the soil; and the grain then gets as much food from the cut as it could from the standing straw. Hence, when the straw turns yellow under the ear, however green the rest part of it may be, the grain should be cut; and when the straw becomes badly affected with rust or mildew, the sooner it is cut the better.

Do not put the plough into your corn, if you have, as you may have for a trifle, a cultivator or horse hoe. It severs the roots, which are the mouths of the plants, turns up and wastes the manure, which should always be applied to this crop, and deprives the plants of more than half their pasture. Hill your corn but slightly. Hilling renders it more liable to suffer from drought, and induces it to throw out a new set of roots, the old ones being in a manner useless, by being buried too deep, and beyond the influence of heat and air. The indispensable agents of nutrition and vegetable growth.

POTATOES FROM SEED.

At a late meeting of the Hampshire, Hampden, and Franklin Agricultural Society, a premium of 5 dollars was awarded Mr. Zachariah Wilder, for the best ten bushels of potatoes raised from the seed of potato balls; being the best method to recover or revive the genuine potato when degenerated. "The potatoes exhibited were the product of seed of potato balls, obtained by planting selected potatoes near each other to cross the varieties if practicable; among which were the rusty-coat, the blue noses, pinkeye, and foxite. The potatoes exhibited were of the second year's growth from the seed. There were not less than 50 distinct varieties, from which were selected and cooked a few of the best sorts, such as were exhibited. They are of a large size, in shape resembling the kidney, pinkeye, and foxite potatoes; and having been cooked and tested by other competent judges are found to be as fine a potato as can be desired for the table. We are always pleased to notice experiments of this kind, as by such original crosses new varieties of this invaluable root may be produced, equal, and perhaps superior, to any we now have.—Genesee Farmer.

Mode of Preventing the Ravages of Insects.—A Petersburg paper states that the water in which potatoes have been boiled, sprinkled over grain, plants, &c., completely destroys all insects in every state of their existence from the egg to the fly.

AMERICAN INSTITUTE.

Ploughing Exhibition, and Sale of Cattle.—

At the request of a number of agricultural gentlemen, seconded by others friendly to that important interest, a trial of ploughs has been determined upon by the American Institute this season. The pleasant village of Hoboken has been selected for this purpose, contiguous to Mr. Dye's Hotel, opposite the city of New York, on the Elysian Fields—where suitable teams will be provided. This is not intended to prevent gentlemen from bringing their own teams, if preferred. The ploughing will commence on Tuesday, the first of August next, at 2 o'clock, P. M.

The object will be fairly and fully to test the comparative merits of the various ploughs that may be brought for competition, and, as far as practicable, to ascertain the form best adapted to accomplish the work in ordinary ploughing. Strength of construction, durability, liability to get out of order, adaptation of parts as to admit of repairs readily, their capability easily to accomplish various kinds of work, breadth and depth of furrow, &c., will be subjects of consideration. Competent judges will be appointed, consisting of practical farmers, with one or more skilful mechanics, to aid in deciding on the mechanical work of the specimens.

Ploughs may be exhibited, and entered for competition, by persons from any part of the Union.

A medal will be awarded by the Trustees of the Institute, for the plough which the judges shall pronounce the most perfect; and for the second best a diploma.

It has also been requested that there should be a sale of choice cattle during the afternoon of the exhibition. In compliance with this request, and to give those who have choice cattle, an opportunity to avail themselves of so favorable an occasion, and with a view of spreading and multiplying valuable breeds of cattle in our country, a public sale has been resolved upon; and an auctioneer selected, who has volunteered to make the sales without any charge. Any person may enter their cattle for sale free of expense. Suitable enclosed pasture ground for the cattle will be provided.

The public generally, whether farmers, manufacturers, mechanics, merchants, or professional men, are all invited to join in this pleasant, healthy, rational and useful afternoon's recreation. Other agricultural machines, or implements may be exhibited on the occasion. The ploughing and sale will be succeeded by a collation at Mr. Dyer's Hotel, where those who wish may join. A short address will be delivered.

A description of each plough; by whom made; the price, and where offered for sale, it is requested may be handed in by the exhibitor, to the Secretary or the Trustees.

If it should storm on the day mentioned, the exhibition will take place the first fair day thereafter. The Trustees will meet punctually on the ground at 2 o'clock, P. M.

Repository of the American Institute, N. Y.

JAMES TALLMADGE,
ADONIRAM CHANDLER,
GEORGE F. HOPKINS,
ANDREW WILLIAMS,
E. D. PLIMPTON,
T. B. WAKEMAN,
JOSEPH TITCOMB,

Trustees of
the
American Ins.

USE OF LIME FOR PRESERVING FENCES
AND BUILDINGS.

Mr. Editor.—Calling some time since on a friend of mine, who is a curious observer of things, he communicated to me, among other items of information, his method of painting, or rather whitewashing his buildings, to preserve them from decay. I was so much interested by its simplicity, as well as cheapness, that I took a memorandum at the time, of the materials used, expense, &c.

The materials are common salt and lime. Put about a quart of salt to a pail full of water, or rather as much as the water will dissolve. Then add fresh slackened lime—enough to give the proper consistency to apply with a brush. It should not be too thick, as that will cause it to peel off—and it will be necessary to put two coats. He says you may add paints if you please, to give it a different color. The whole expense of the materials, and putting on the same, would exceed two dollars and fifty cents, for a house 36 feet long, 18 wide and 18 high.

I find also, in looking over my papers, in the New York Farmer for April, 1836, the following recipe for an incombustible wash for buildings, to render them fire-proof; and also a coating for brick work, to render it impervious to water.

Proportion for five gallons. The basis is lime, which must be first slacked with hot water in a tub, and covered to keep in the steam; it then should be passed in a fluid form through a fine sieve to obtain the flour of the same. Six quarts of lime, and one quart of clean rock salt for each gallon of water, to be dissolved by boiling, and skimmed clean,—then add to five gallons, one pound of alum; half a pound of copperas, three-fourths of a pound pot ash,—the last to be gradually added,—four quarts of fine sand, or hard woodashes, say hickory. You may add any colouring matter that your taste may dictate. It should then be applied with a brush; and it will, it is said, look better than paint, and be as lasting as slate. It will stop the small leaks, prevent the moss from growing, and render the parts painted with it incombustible.

Peru, Jan. 1838.

J. H. J.

P. S. The 6 quarts of lime, I suppose, is for five gallons.

[Maine Farmer.]

[From the Journal of the Franklin Institute.]

EFFECT OF CULTIVATION UPON
CLIMATE.

The question of the tendency of cultivation, and more especially the clearing of forests, upon the temperature of countries, has been much discussed, but without those definite results, which a subject of so much interest naturally claims. Until meteorological statistics shall be more diligently and accurately preserved, which there is reason to believe will be the consequence of an increasingly enlightened and expanding system of legislation, this question will not be solved with the desired precision. No country in the world, is more favorable to its accurate solution than our own. In one respect, the means are at hand of throwing much light on this subject,—namely—whether, within the observation of the settlers of our new countries, there has been any

diminution or increase of the level of the water of lakes and ponds, and the quantity which flows in rivers which can be ascribed only to the effect of clearing and cultivation.

In a memoir on this subject by M. Baussingault, a translation of which appears in Jameson's Edinburgh Journal, Jan. 1833, facts are detailed from which the author draws the following conclusions:—

1st. "That the extensive clearing of a country diminishes the quantity of running water which flows over its surface; 2dly, that it is impossible for us to determine, at present, whether this diminution is owing to the smaller annual quantity of rain, or to an increased evaporation of the surface-water; or to those two causes combined; 3dly, that the quantity of running water does not appear to have varied in countries which have not been subjected to any changes arising from the progress of cultivation; 4thly, that, independent of the preservation of surface water, forests husband and regulate their flow; 5thly, that cultivation, when established in an arid country, which is not covered with forests, dissipates a portion of its running streams; 6thly, that, in clearings which are purely local, springs may disappear, without there being any ground to conclude that the annual quantity of rain has diminished; 7thly, that drawing our conclusions from the meteorological facts collected in equinoctial regions, we may presume that the extensively clearing of a country diminishes the annual quantity of rain which falls upon it."

M. Baussingault enjoyed extensive opportunities of observations in South America as well as in Europe. No traveller since the time of Humboldt, has turned to a better account such opportunities in connexion with the resources of science. He cites the following, among other cases.

"Oviedo, who, towards the end of the fifteenth century, so often traversed the valley of Aragua, positively affirms that New Valencia was founded in 1555, at the distance of half a league from the lake of Tacarigua; and M. de Humboldt found, in the year 1800, that the town was more than three miles (2709 toises) distant from its banks. The aspect of the district exhibits additional evidence of a great change. The rising grounds, which are somewhat elevated above the plain, maintain to the present day the name of islands, which at a former period, was most accurately assigned to them, seeing they were surrounded with water. The space which has been exposed by the retreat of the waters has been transformed into most fertile fields for the cultivation of cotton, sugar-cane, and the banana tree. These buildings which were reared in the immediate vicinity of the water are seen to be more and more forsaken by it. New islands made their appearance in the year 1796. An important military post in the shape of a fortress, which was built in 1740 in the island of *Cabrera*, is now situated on a peninsula. Lastly, in two islands of granite, those, namely, of *Cura* and of *Cabo-Blanco*, M. de Humboldt discovered, among the bramble bushes, several yards above the level of the water, deposits of fine sand, containing many *helicites*.—Facts which are so speaking as these, and withal so well ascertained, could scarcely fail of exciting the ingenuity of the learned on the spot, in the way of supplying explanations of the remarkable

change; and they all agreed thus far, that some subterranean conduit had been opened up, which allowed the waters to flow freely to the ocean.—M. de Humboldt, when on the spot, paid all due regard to this supposition, and after an accurate examination of the localities, came very decidedly to the conclusion, that the cause of the diminution of the waters of the lake of Tacarigua was nothing more than the extensive clearing away of the woods, over the whole valley, during the course of the former half century. "In laying low the trees," he observes, "which covered the tops and flanks of the mountains, mankind, in all climates are, at one and the same time, entailing two great calamities upon succeeding generations; they are producing a scarcity both of wood and water."

Since the time of Oviedo, who, like all the older chronologists, is perfectly silent concerning any subsidence of the water of the lake, the cultivation of indigo, sugar, cotton, and cocoa, had been carried to a great extent. In the year 1800 the valley of Aragua maintained a population as dense as that of any of the most populous portions of France. The smiling prosperity which existed in the numerous villages which teemed with its industrious population, could not be witnessed without the greatest satisfaction. Such was the prosperous condition of this charming country when M. de Humboldt was sojourning in La Hacienda de Cura.

After a lapse of twenty-two years, it was my lot afresh to visit the valley of Aragua. I fixed my residence in the small town of Maracay. I soon found that, for many years, the inhabitants had been remarking not only that the waters of the lake had ceased to subside, but, on the other hand, they affirmed they were very decidedly rising. The lands which had been formerly occupied in the cultivation of cotton were now submerged. The islands of Las Nuevas Aparecidas, which had risen above water in the year 1796, had now become shallows, which were dangerous for navigation. The tongue of land near to Cabrera, at the northern side of the valley, was now so narrow, that the smallest rise in the lake altogether inundated it; and a steady breeze from the north-west was sufficient to submerge the road which led from Maracay to Nueva Valencia.

The fears, which for so long a time had annoyed the inhabitants on its banks, were now altogether changed in their character; and they no longer dreaded the entire disappearance of the lake. They were now anxiously considering if these successive invasions of the rising waters were about to overwhelm their properties; and those who had explained the previous diminution, by the existence of subterranean canals, were convinced that they were now choked up, and that nothing would save them but opening the conduits afresh.

During the two-and-twenty years which had intervened, important political transactions had occurred. Venezuela now no longer belonged to Spain. The smiling valley of Aragua had been the arena of the most bloody contests, and war and death had desolated those happy scenes, and greatly reduced the population. On the first cry of independence, a number of slaves obtained their liberty by fighting under the standard of the new Republic. Its wide spreading cultivation was neglected; the forest trees, so luxuriant with-

in the tropics, had again in a great measure usurped dominion over that region, which its inhabitants, after a century of constant and painful labour, had reclaimed. During the growing prosperity of the valley of Aragua, the numerous streams which fed the lake had been arrested and employed in innumerable irrigations, and their beds were found dry for more than six months of the year. At the last epoch to which I have alluded, the streams being no longer so diverted flowed without interruption. Thus, then, during the progress and continuance of agricultural industry in the valley of Aragua, when the process of clearing was pushed farther and farther, and when cultivation in every shape was advancing, the level of the water gradually subsided. More lately, on the contrary, during a period of misfortune, and, we would fain hope, but temporary, when the clearing was no longer continued, and the cultivated lands have fallen back into their wild state, the waters having ceased to fall, and are now very speedily assuming a decided rising movement.

I shall now direct my remarks to another quarter, without however leaving America, in which we find a climate analogous to that of Europe, and where we traverse immense districts producing the most valuable grains. I shall direct attention to the higher lands of New Grenada, and to those elevated valleys, from 6000 to 9000 feet above the level of the sea, which enjoy, throughout the year, a temperature of from 58° to 62° Fahr. Lakes are frequent among the Cordilleras; I might easily dwell upon many of these, but shall bring under review only those which have been the subject of previous observations.

The village of Ubata is placed in the vicinity of two lakes. It is an important fact that, sixty years ago, these two sheets of water formed one only. The older inhabitants have observed the waters gradually diminish, and their shores extend themselves year after year. Fields of corn, of the greatest fertility, at the present time cover districts which thirty years ago, were completely covered with water. The falling of the mean level of this lake will the more readily be credited by the consideration, that an occasional fall of three or four inches lays bare a great extent of surface. If we inquire in the neighbourhood of Ubata of any of the old men, who in their younger days were devoted to the chase, or if we examine the records of any of the different parishes, no doubt will remain that numerous forests have been felled. The clearing still goes on; and it is equally certain that the retreat of the water has not ceased, though it does not advance so rapidly as it was wont to do.

It is hoped that such of the readers of the Journal of the Institute, as may have the means of obtaining correct information on a question of this nature, in the interior and particularly in the more elevated regions of the United States, will not neglect the opportunities they enjoy, and that the facts which they obtain, may be given to the public in that, or some other Journal, so as to serve the purpose of accumulating evidence in relation to the meteorology of our country.

G.

Wool and Woollen Manufactures.—The following is an exhibit of the number of sheep in

each state, and of the woollen manufactories—the number of pounds produced in each state, and its value, at 50½ cents, which seems to have been the average price for the last ten years.

	Sets	Quantity	Amount
	Sheep.	Machinery.	lbs. Dollars.
Maine,	522,619	24	2,023,512 1,021,873
N. Hampshire,	465,179	23	1,511,832 763,476
Vermont,	1,099,011	100	3,571,886 1,803,751
Massachusetts,	373,322	519	1,213,297 612,715
Rhode Island,	81,619	80	265,262 133,957
Connecticut,	265,169	184	829,299 410,313
New York,	4,299,879	234	12,974,606 7,057,176
New Jersey,	250,000	20	218,500 410,313
Pennsylvania,	1,714,640	123	5,572,580 2,814,158
Delaware,	150,000	20	487,500 246,187
Maryland,	275,000	15	893,750 451,333
Virginia,	1,000,000	—	3,350,000 1,641,250
Ohio,	1,711,200	30	5,561,400 3,808,500
Kentucky,	6,00,000	—	1,950,000 984,750
Total,	12,897,638	882	41,917,324 21,158,256

There was imported, in 1836, over and above our exports, 12,296,249 pounds of foreign wool, mostly of coarse quality, costing abroad less than eight cents per pound, and not subject, therefore to duty.

Of this gross amount of wool, it is estimated that thirty-one millions of pounds were worked up in the manufactories, leaving 12 millions for family manufacture; three millions and a half pounds of which are supposed to be worked up in New York, three in Pennsylvania, and two in Ohio.

The manufacturing establishments are employed in the following fabrics, viz:—In broadcloths, 344; cassimeres, 178; satinets, 574; flannels, 158; jeans, linseys, &c. 210; blankets, yarns, and hats, 24; carpets, 61.—Total sets of machinery, 1,549.

Hoosick has 37,907 sheep, the greatest number of any town in this state; and Dutchess county 234,294, the greatest number of sheep of any county in the state.—*Jour. Amer. Inst.*

TURNIP SEEDS.

5000 lbs. Turnip Seeds of first quality of the following kinds, will be supplied at the very lowest wholesale rates; which will enable venders to make large profits in selling by the pound, and far larger when selling in smaller parcels.

Purple topped Ruta бага or Yellow Swedish Turnip, White flat Field, White Norfolk, Early White Dutch, Yellow Dutch, Yellow Flat Field, Yellow Aberdeen, Large Yellow Bullock, Long Tankard, Yellow Stone, White Stone, Yellow Maltese, Dale's New Yellow Hybrid, Swan's Egg, Red top or Red Round, Green top or Green Round, and others.

Also, for sale, every other kind of Garden, Flower and Agricultural seeds. A liberal credit to venders—and priced catalogues will be sent to all who desire.

N. B. 600,000 Chinese Morus Multicaulis Trees, 3 to 6 feet high, deliverable in October—and 200,000 Morus Expansa, Brussa, and other choice varieties.

WM. PRINCE & SONS,
July 17 9t Flushing, New-York.

DAHLIA ROOTS.

The subscriber can furnish any quantity of DAHLIA ROOTS to the number of one thousand, recommended to be a choice variety, all of the double kind, and from the well known nursery of Samuel Reeves, Esq'r. near Salem, New Jersey. I can also furnish from the same nursery very superior APPLE TREES for spring planting, if orders are given in soon for them. Peach Trees cannot be furnished from the said nursery before next fall,

J. S. EASTMAN.

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every Monday

	PER	FROM	TO
BEANS, white field,.....	bushel.	1 25	
CATTLE, on the hoof,.....	100lbs	8 50	9 00
CORN, yellow.....	bushel	72	
White.....	"	68	70
COTTON, Virginia,.....	pound	9	11
North Carolina,.....	"	10	11
Upland,.....	"	9 1/2	11
Louisiana ——— Alabama	"	10	11
FEATHERS,.....	pound.	48	50
FLAXSEED,.....	bushel.	1 12	
FLOUR&MEAL—Best wh. wh't fam.	barrel.	10 00	
Do. do. baker's.....	"		
SuperHow. st. from stores	"	7 50	
" wagon price,	"	7 00	
City Mills, super.....	"	7 50	
" extra	"	8 00	
Susquehanna,.....	"		
Rye,.....	"	4 50	
Kiln-dried Meal, in hhd.	hhd.		
do. in bbls.	bbl.		
GRASS SEEDS, wholes. red Clover,	bushel.		
Kentucky blue	"	2 50	3 00
Timothy (herds of the north)	"	2 25	2 50
Orchard,.....	"	2 00	2 50
Tall meadow Oat,.....	"	3 00	
Herds, or red top,.....	"	1 00	1 25
HAY, in bulk,.....	ton.	10 00	15 00
HEMP, country, dew rotted,.....	pound.	6	7
" water rotted,.....	"	7	
Hogs, on the hoof,.....	100lb.	7 00	
Slaughtered,.....	"		
Hops—first sort,.....	pound.	9	
second,.....	"	7	
refuse,.....	"	5	
LIME,.....	bushel.	33	34
MUSTARD SEED, Domestic, —; blk.	"	3 50	4 00
OATS,.....	"	26	27
PEAS, red eye,.....	bushel.	1 12	
Black eye,.....	"	1 00	1 12
Lady,.....	"		
PLASTER PARIS, in the stone, cargo,	ton.		
Ground,.....	barrel.	1 50	
PALMA CHRISTA BEAN,.....	bushel.		
RAGS,.....	pound.	3	4
RYE,.....	bushel.	75	85
Susquehanna,.....	"		none
TOBACCO, crop, common,.....	100 lbs	3 50	4 50
" brown and red,....	"	4 00	6 00
" fine red,.....	"	8 00	10 00
" wrappry, suitable	"		
for segars,.....	"	10 00	20 00
" yellow and red,....	"	8 00	10 00
" good yellow,.....	"	8 00	12 00
" fine yellow,.....	"	12 00	16 00
Seconds, as in quality, ..	"		
" ground leaf, ..	"		
Virginia,.....	"	4 50	6 00
Rappahannock,.....	"		
Kentucky,.....	"	5 00	8 00
WHEAT, white,.....	bushel.		
Red, best	"		
Maryland inferior	"		
WHISKEY, 1st pf. in bbls.....	gallon.	33	33 1/2
" in hhd.....	"	31	
" wagon price,	"		
WAGON FREIGHTS, to Pittsburgh, ..	100 lbs	1 25	
To Wheeling, ..	"	1 50	
WOOL, Prime & Saxon Fleeces, ..	washed. unwashed.	40 to 50	20 22
Full Merino,.....	"	35	40 18 20
Three fourths Merino,.....	"	30	35 18 20
One half do.....	"	25	30 18 20
Common & one fourth Meri.	"	25	30 18 20
Pulled,.....	"	28	30 18 20

MORUS MULTICAULIS TREES.

The subscriber has from 25,000, to 30,000 Morus Multicaulis trees now growing at his residence, with roots of 1, 2, and 3 years old, which will be ready for sale this fall, and which he will sell on moderate terms.

EDWARD P. ROBERTS.

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,.....	barrel.		
BACON, hams, new, Balt. cured....	pound.	13	13 1/2
Shoulders,.... do.....	"	11	
Middlings,.... do.....	"	11	
Assorted, country,.....	"	9 1/2	10
BUTTER, printed, in lbs. & half lbs.	"	20	25
Roll,.....	"		
CIDER,.....	barrel.		
CALVES, three to six weeks old....	each.	5 00	6 00
Cows, new milch,.....	"	25 00	40 00
Dry,.....	"	12 00	15 00
CORN MEAL, for family use,.....	100lbs.	1 62	
CHOP RYE,.....	"	1 50	1 60
EGGS,.....	dozen.	12	
FISH, Shad, No. 1, Susquehanna,	barrel.	9 75 1/2	10 00
No. 2,	"	9 50	
Herrings, salted, No. 1,.....	"	4 25	4 75
Mackerel, No. 1, ——— No. 2	"		
No. 3,	"		
Cod, salted,.....	cwt.	3 00	3 25
LARD,.....	pound.	10	11

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

U. S. Bank,..... par	VIRGINIA.
Branch at Baltimore,.... do	Farmers Bank of Virgi. 14
Other Branches,..... do	Bank of Virginia,..... do
MARYLAND.	Branch at Fredericksburg, do
Banks in Baltimore,.... par	Petersburg,..... do
Hagerstown,..... 3a	Norfolk,..... do
Frederick,..... do	Winchester,..... do
Westminster,..... do	Lynchburg,..... do
Farmers' Bank of Mary'd, do	Danville,..... do
Do. payable at Easton,.... do	Bank of Valley, Winch. par
Salisbury,.... 1 per ct. dis.	Branch at Romney, ... par
Cumberland,..... do	Do. Charlestown, par
Millington,..... do	Do. Leesburg, ... 14
DISTRICT.	Wheeling Banks, ... 3 1/2 a4
Washington,.....	Ohio Banks, generally 5a6
Georgetown, } Banks, 1p.c.	New Jersey Bankgen. 3
Alexandria, }	New York City, par
PENNSYLVANIA.	New York State, do
Philadelphia,..... par	Massachusetts, 1 1/2 a2
Chambersburg,..... 1/2	Connecticut, 1 1/2 a2
Gettysburg,..... do	New Hampshire, 1 1/2 a2
Pittsburg,..... 2 1/2	Maine, 1 1/2 a2
York,..... 1/2	Rhode Island, 1 1/2 a2
Other Pennsylvania Bks. 2	North Carolina, 5
Delaware [under \$5].... 4	South Carolina, 6a7
Do. [over 5]..... 1 1/2	Georgia, 8a10
Michigan Banks,..... 10	New Orleans, 8a10
Canadian do..... 10	

FOR SALE,

Two superior DEVON bulls, 4 years old this spring, of the purest blood in the country. fine form and remarkably large. Any gentleman wishing to procure one will find it to his advantage to embrace the present opportunity, as they will be sold at the low price of \$100 each, deliverable in Baltimore.

Applications in writing, post paid, to be made to the subscriber.

EDWD. P. ROBERTS, Baltimore, Md.

may 29

FARMERS' REPOSITORY OF AGRICULTURAL IMPLEMENTS AND EAST MAN'S CYLINDRICAL STRAW CUTTERS IMPROVED.

THE Subscriber informs the public that he has secured by letters patent his late and very important improvements on his Cylindrical Straw Cutter, by which improvements they are made more durable and easier kept in order. All the machinery being secured to an iron frame the shrinkage, wear and decay of wood is avoided. The feeding part of his improved machine is upon an entire different principle from the former machine; far more durable, requiring neither skill or care to keep it in order. These machines are so constructed as to make the freight on them less than half what it cost to ship the former or wood machines, an important desideratum to purchasers living at a distance; and I now offer it to the public upon

the credit of my establishment as the most perfect machine in existence for the same purpose. They are also adapted to cutting rags for paper making, and for cutting tobacco as manufactured by Tobacconists, &c.

I also keep these machines on hand made as heretofore with my new feeding machinery attached to them; and also a general assortment of Agricultural Implements, as, usual. Elliott's Horizontal Wheat Fans, and Fox & Bolland's Threshing Machines are both superior articles.

My stock of Ploughs on hand are not equalled in this city either for quality, quantity, or variety. I have a large assortment of Plough Castings at retail or by the ton, and having an Iron Foundry attached to my establishment can furnish any kind of Plough or Machine Castings on reasonable terms and at a short notice.

All repairs done with punctuality and neatness. On hand, a few Patent Lime Spreaders, Horse Powers, &c. &c.

Also just received, a fresh supply of Landreth's superior Garden Seeds. In store, superior Timothy and Orchard Grass Seed and Seed Oats. All implements in the agricultural line will be furnished by the subscriber, as good and on as reasonable terms as can be had in this city, with a liberal deduction to wholesale purchasers. Likewise will receive orders for Fruit Trees from Mr. S. Reeves' Nursery, New Jersey.

JONATHAN S. EASTMAN,

Pratt street, Baltimore,

feb 20

Between Charles & Hanover sts

TO THE PUBLIC.

Try the New Agricultural Establishment in Grant-street, next door to Dinsmore and Kyle.

Every article warranted to be first rate. The subscribers, grateful for past favors, take this early opportunity of returning their thanks to their customers and the public in general, and beg leave to inform them that they are now provided with a very extensive stock of newly manufactured AGRICULTURAL IMPLEMENTS, suitable to meet the call of Farmers, Gardeners, Merchants, Captains of vessels, and others, viz: 1000 Ploughs, assorted sizes, from \$4 to \$15 each, comprising of the old common Bar Shear, Winand's Self Sharpener; Woods & Freeborn's patent, all sizes, "Davis", "Sinclair & Moore's" improved Hill Side Ploughs, highly esteemed for turning the furrow down hill, with wrought or cast shears; Wheat Fans, of various sizes and patterns, from \$15 to \$50 each, warranted to separate the garlic from the wheat; Corn Shellers, from \$12 to \$20; Cutting Boxes, from \$7 to \$50 each; Corn and Tobacco Cultivators, large and small; Expanding do., Wheat Cradles, warranted to have fingers of the natural growth, and Grass Scythes, &c. &c.; Castings, of all descriptions and patterns, by the lb. or ton, to suit customers, allowing a liberal discount to merchants buying to sell again—all of which will be furnished on the most pleasing terms and every article warranted to be of the best quality, in proportion to the cost price. All orders by mail or otherwise shall be duly attended to with the greatest despatch.

We would particularly call the attention of Country Merchants and others, wishing to purchase agricultural implements to sell again, to the fact, that we will furnish them with articles on better terms than they can be supplied at any other establishment in the city. Our assortment is complete and as varied as that of the most extensive concern in Baltimore.

We have also connected in its operations with the above branch of business a complete assortment of FIELD AND GARDEN SEEDS, kept by Thomas Denny—Also Garden and Farm Tools, of various sorts and of the choicest collection, which will enable our customers to have filled entire all orders in the Agricultural and Seed Departments. mh 26 JOHN T. DURDING & Co.

GRODND PLASTER OF PARIS,

Of superior quality, in bbls. on hand and for sale by

JONA. ELLICOTT & SONS,

may 8 3t

south end of Patterson st.

CONTENTS OF THIS NUMBER.

Notice of Mr. D. Stuart's farm—importation of silk—produce of spring wheat—blight in grapes—prevention of disorders in horses—remedy for the caterpillar worm on fruit trees—produce of butter from four cows—on culture of tropical plants by H. A. S. Dearborn—to make butter—prognostics of the weather—exhibition at the Columbian Hort. Society—hints for July—potatoes from seed—ploughing exhibition and sale of cattle at N. York—use of lime for fences and buildings—effect of cultivation upon climate—wool and woolen manufactures in the U. S.—advertisements and prices current.

THE FARMER & GARDENER

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, E. P. ROBERTS AND SAMUEL SANDS—EDITED BY E. P. ROBERTS.

No. 13.

BALTIMORE, MD. JULY 24, 1838.

Vol. V.

THIS publication is the successor of the late
AMERICAN FARMER,
and is published at the office, at the N. W. corner of
Baltimore and North streets, over the Patriot office, at two
DOLLARS AND FIFTY CENTS per annum, if paid within one
month from the time of subscribing, or \$3 if after that
time. All letters to be post paid.

BALTIMORE: TUESDAY, JULY 24, 1838.

SOAP SUDS.

If the soap suds made in a farmer's family were thrown on his compost heap, they would add greatly to the value of his manure, and repay him with compound interest for all the trouble, expense and labor he might be at in transporting them thither.

One hog'shead of suds would enable him to add an ox-cart of ordinary dirt to his manure, which would be thus enriched so as to be equal to the best barn yard dung for any purpose, and as a top dressing for meadows would be equal to so much ashes.

BURNT CLAY.

The absorbent qualities of burnt clay are very powerful, and tend greatly to improve the texture and improve the productive qualities of all light soils. Though not so strong as ashes, in the absence of this manure it will be found highly salutary in giving tenacity to such lands, and increasing their capacity of attracting and retaining moisture.

THE WHEAT CROP.

Unless our information deceive us, we think the subjoined extract of a letter, which we copy from the National Intelligencer, is a fair representation of the wheat crop in all the wheat growing regions of our country. There are doubtless some exceptions; but this year at least is one in which Providence has been kind in blessing the farmer with abundant crops of wheat, and to its abundance do we thankfully look forward as a source of extricating the country from its embarrassments:

A letter from a gentleman residing in that fertile valley of Virginia immediately on the borders of Clarke and Jefferson counties, dated July 15, 1838, to a friend in this city, says:

"You have no doubt heard that the wheat crop was very promising. In the progress of harvest-

ing, it surpasses expectation, and I believe it is the very best crop that was ever raised in this section of country."

A VALUABLE SUGGESTION.

Gideon B. Smith, Esq. of this city, has suggested a most valuable method of destroying the chrysalis in the cocoons of the silk worm. It consists simply in exposing them to the influence of ignited charcoal. A friend to whom he made the suggestion, has, we learn, made an experiment on his plan, which proved entirely successful, and we have no doubt, ourselves, that, it will prove a most invaluable acquisition to silk culturists, as besides being the most economical method of killing the chrysalis, it will effect its object without hardening the gum on the cocoons, thus rendering them much easier to reel. On a rough calculation, we think fully one fourth of the expense of the process may be thus saved.

As has been the case in others of his discoveries, we should not be surprised, if some ingenious savan of Paris should make the discovery of this method, and that it should be trumpeted forth by the American press as a pearl of exceeding great price, as this is the country where "genius languishes and fancy dies," and *fashion* has long since decreed that the *old saw* of Shakespeare, that "that which we call a rose, by any other name would smell as sweet," is a mere fiction of the brain—a coinage of the poet.

We visited *Orange Farm*, the estate of Samuel W. Smith, Esq. some days since, and was highly gratified to find every field in culture bearing testimony to the luxuriant growth of vegetation. Although the grain had been garnered, and the hay nearly cut, still the stubble shewed that good farming and highly improved soils had met their rewards; for the abundance was visible in every direction. This fine estate, as many of our readers will recollect, was once the pride of Maryland as a *dairy farm*, and forms in the mind of most of them, one of those treasured recollections on which they like to dwell. Of late years, it has been converted into a grass farm, and has as such realized every rational expectation which could be formed of it.

We saw a patch of Italian Spring Wheat which

had just been cradled, the ample and well filled heads of which satisfied us that success had attended the experiment of its culture. A few acres of *Dutton Corn* also pleased us, and we are certain, if nothing should occur to blight the prospects which may now be formed of its product, that it will become a favorite with the intelligent owner. The main crop of corn, say from 40 to 50 acres, is all that could be desired of it; for we have scarcely ever seen more prolific or healthful fields. The oats though not as heavy as we have seen, is a fair yield; the potatoes and other vegetables looked well, and promise abundant returns. This estate is at present under the careful management of Mr. Keys, an intelligent Pennsylvania farmer, and bears strong evidence that neither the liberality of its owner, nor the skill of his manager have been wanting to push it forward to the highest state of improvement of which it is susceptible. To us it is always a source of unmixed pleasure to see our gentlemen of fortune thus laudably exerting their talents and means, in elevating the agricultural capacity of the soil of Maryland, and we sincerely hope, that the owner of *Orange Farm* may long live to reap the fruits of an enlightened system of husbandry, and enjoy the self-approval, which always enures to those whose well directed public spirit increase the productive powers of the earth, and consequently add to the comforts of mankind.

FEEDING OF MOCKING BIRDS.

To the Editor of the Farmer and Gardener:

Dear Sir—I have a mocking bird in my possession, and I do not know exactly how to raise it. So I thought I would write you word, and ask you to give me some information about it, if you please in the next paper. By so doing you will oblige

Your sincere friend,

TRUEMAN D. BECKETT.

Bladensburg, Md. July 15, 1838.

The mode generally used in rearing mocking birds consists in feeding them with light wheat bread moistened with new milk, or corn meal dough moistened with milk. Occasionally grasshoppers, or flies are given them, as also small portions of finely chopt fresh meat; a boiled egg should also occasionally be chopt fine and given them, say once or twice a week. Their cage must at all times be kept clean; it should be washed at least

three times a week, and the floor at all times kept well sanded. A few mustard seed, say twice a week, should be given them. Fresh water twice a day must be given them. Pieces of ripe fruit, in season, should be stuck in the wires or sticks of their cage, for them to eat at their pleasure.

MUD AS A MANURE.

JUNE 25, 1838.

Edward P. Roberts, Esq.

Dear Sir—I have a mill pond made (perhaps,) 50 or 60 years ago. When first made it contained a large body of water, but now it is nearly filled up with leaves and soil from the woods and fields lying on and around the stream above the pond, and the coarse aquatic grasses that have grown in it and rotted down yearly for the last twenty years or more.

In the Farmer and Gardener I sometimes see mud of this kind spoken of as good manure when properly prepared and applied.

Could not you or some of your correspondents answer the following questions?

Can the fillings of ponds, (such as above described,) be profitably used as manure?

If it can be so used, whether best to use lime with it and a compost? If yea, in what state should the mud be when mixed with the lime?—whether best as it is when first hauled from the pond, or put in heaps to dry previous to mixing in the lime?

Whether would it be best, or the most economical, to mix the lime and mud together, in a pile or heap, previous to putting it on the land, or to haul each separately on the field, and let them be mixed by cultivating the land, supposing the field to have been previously limed, or not? If best mixed in a pile, what proportion of lime should be used. I mean the smallest quantity that could be used advantageously.

On what kind of crop should it be used? And you will confer a favor by giving any other information you possess on this subject.

Very respectfully, W. H. P.

N. B. The sugar beet seed you were so kind as to get for me has come up well, and is growing finely; but I was unfortunate with my mangle wurzle—it has come up so badly as not to be worth tending; the seed could not have been good—I procured it in B., but not through you.

ANSWERS

By the Editor of the Farmer and Gardener.

As all of the above questions tend to the same point, I shall treat them collectively, and endeavor to do so in a way to be distinctly understood.

There can be no doubt that the mud, contained in the mill pond above described, can be profitably used as a manure, and our correspondent will the more readily come to this conclusion when he reflects of what it is composed. All such places of deposits are filled by the washings from the surrounding fields and hills, and necessarily contain much of the best portions of the alluvial soils

contiguous thereto, as well as large accumulations of undecomposed vegetable matter. Such bodies, therefore, it must be obvious, of themselves, possess the materials, in a crude state, for making most valuable composts; but as they most generally contain an excess of vegetable substances, in too acid a state for immediate use, it is necessary to apply some agent as a corrective, and that agent is most happily combined in *lime* or *marl*.

The next question which presents itself, is, at what time, how, and in what proportions are those substances to be combined? and we will begin first with *time*. With regard to *time*, the best period is the fall of the year, after the existence of black frost, because by delaying it till that period, all injurious effects upon health will be avoided.

With respect to the relative proportions of the *lime* and *mud*, twenty bushels of the former, to four double horse cart loads of the latter, are the proper ones, and we think if the water was permitted to drain off previous to being mixed, it would be best. When ready for compounding, let the above quantity of mud be spread on the earth, (and it would be still better if it be hauled convenient to the field where it is to be used) and then distribute equally on its surface twenty bushels of lime, then four loads of the mud, and twenty more bushels of the lime, and so continue until your compost heap is formed. Let it thus remain until spring, when it should be turned over and thoroughly incorporated together.—Should the manure thus made be wanted, in the spring, it may be used on the corn ground with decided advantage in the proportion of ten double cart loads to the acre, though our own opinion is, that it would be better to let it remain unused until autumn, giving it in midsummer another turning and mixing, when it should be used in the same quantity in wheat lands.

A compost thus formed, will be found equally good for corn, wheat, rye, oats, potatoes, grass, and, indeed, for all the crops usually grown, where manure is required? Thus compounded and treated, mud of the description described, will be found to possess in their happiest forms all the elements of the food of plants, and the observing farmer will quickly perceive, that in every pond, drain and ditch on his farm, he has an invaluable source of manure, and that it will be his own fault if he does not turn it to a good account.

If *marl* be used, the quantity must be regulated by its specific strength; but it may, as a general rule, be assumed, that from one to two hundred bushels may be safely used to the quantity of mud named. Should neither *lime* nor *marl* be con-

venient, from fifty to a hundred bushels of ashes will answer in their stead.

If the field on which the mud is desired to be used has been previously and recently well limed, the mud alone after being exposed for a season to the operation of frost and sun, and turned over and mixed as before directed, may be used, though, beyond all doubt, the addition of the lime will operate greatly to improve its value.

We are happy to learn from our correspondent that the sugar beet seed we procured for him came up well, and is growing finely, as we are sure that through his intelligence and enterprise, much will be done to spread its culture. We obtained it from that excellent gentleman and sterling patriot, Mr. James Ronaldson, of Philadelphia,—who is so praiseworthy devoting the evening of his days to the good of his kind—and, who instead of spending his time in objects of personal aggrandizement, is engaged in the noble enterprise of promoting the agriculture of his country, by the importation of such seed as he thinks calculated to advance the interests of husbandry; and this he does from the pure motive of doing good, without the least prospect of profit. How sweetly must pass the days of such a man—how peaceful the reflections of his pillow—how honoured his memory,—and how grateful should those be for whose benefit he thus exerts the remaining energies of his life!!

CHARCOAL AND ONIONS.

From a number of experiments recorded in the foreign journals of horticulture, as well as in those in this country, it appears that charcoal dust is one of the best dressings for land on which onions are to be grown. In some of these instances the scraping of the beds where coal had been burned and drawn, were strewn on the garden to the depth of half an inch, and incorporated with the surface earth by raking only, to the manifest advantage of the crop. We have seen fine onions raised on the places where coal has been burnt, several years in succession, and without a failure, while those sown in other places were not half a crop. We have known some instances in which the garden beds were prepared some weeks before sowing, and left for the weeds to start, the seeds of which were near the surface. When the time had arrived for sowing, the beds were covered to the depth of ten or twelve inches with dry straw, and this was set on fire. By this means the surface of the earth is slightly burned, the soil warmed, the weeds extirpated, and an excellent dressing equally applied. If it appeared that one covering of straw was not sufficient, another was spread and burnt, and then the seed was put in, the surface being first slightly stirred with a rake. This method we have never known to fail; and think it might be useful in most cases where the onion is grown, especially on lands rather inclining to be heavy, or which contain the seeds of weeds.

[From the Genesee Farmer.]

CUTTING GRASS.

Mr. Editor—With deference I beg leave to submit to you and (if you think proper) to your readers, a communication concerning the time of cutting grass. I saw in the Monthly Genesee Farmer for April, a query put forth by a farmer, as to the best time to cut grass for hay, and I read your solution of the same with much pleasure.—If in this communication, I should differ from your opinion, or the opinion of your readers, I shall ever stand ready to be corrected. I think late mowing has many advantages over early mowing. In these remarks I shall confine myself to clover and timothy grass, as these varieties are most used for hay in this country. First, as to cutting clover, I think the blossoms should be at least one third of them seared, not ripe, but partly brown. In this stage it will dry much sooner, and the blossoms, together with the stalk and leaf, will remain more fresh and bright than when cut before the blossoms begin to sear a little. In cutting clover when in full blossom, it is almost impossible to cure it so that it will not blacken in the mow. There is a great difference in the juice of the grass in the two different stages of growth. When in full blossom the juice seems to be thin, and when the grass is cured it dries away very much and is light, but when the blossoms are partially seared, the juice becomes more thick and gummy, and the grass when dried does not lose so much in weight, and is not apt to sweat so as to blacken in the mow, but will remain bright; consequently the hay will be better and more nutritious. Secondly, as to cutting timothy grass, it will do to carry the extreme a little farther. As this is decidedly the best grass for hay that is grown in this section, the most used, and the variety which bears the best price in market, I think a proper observation as to the best time for cutting would be highly important. The proper time to cut this grass is when the heads become seared brown from the top at least one third down the head. At this time, the grass may be cut in the morning, and taken in the same day without injury, if the weather is good. The grass at this stage of maturity, will decrease much less in weight in the process of curing, than it will when cut in blossom. The juices will become more solid, the hay will contain more gum, and consequently will be more nutritious. Every farmer knows, that in mowing early, the gum never adheres to the edge of the scythe, let the weather be ever so dry: but when they have cut grass that was ripe, or nearly so, their scythes would gum on the edge so as to prevent the cut of the scythe. I have always considered the adhesion of gum to the edge of the scythe, a sure test as to the goodness of hay. The more gum the better the hay. Cattle and horses like ripe hay best, as well as ripe grain; at least mine do. I have had an opportunity of testing the goodness and value of hay when cut early, and when cut late, and I never had an ox or a horse that would eat early mowed hay if they could get ripe. I have often tried the experiment by putting both kinds in the manger at once. The result has always been that the ripe hay would be eaten up clean, the green hay left. I have heard farmers complain that their working cattle had lost their appetite in the spring, and I have had the satisfaction of convin-

cing some of them, that their cattle had a first rate appetite for ripe hay. When I have been obliged to feed green hay my cattle would never fill themselves. No matter how much I fed them, they would never eat enough to look plump; and I have had always to make up the deficiency in grain and roots. In all meadows, where it is considered an object to grow timothy, and retain it from year to year, it will be found absolutely necessary to have the timothy shell a little from the ripest heads, so that some seed may fall on the ground. By this method you make your meadows much thicker at the bottom, keep June grass out, and grow all timothy as long as you please; by so doing, you will prevent your cattle from the hoof ail, as it is allowed by many experienced farmers that June grass spurred will produce this disease. But if you mow early you will leave no timothy seed on the ground, your meadows will become thin, and June grass will eventually run the timothy all out. The seeds of the June grass fall sooner than any other grass in the country, and this, I think, is the reason that meadows are so full of June grass in this country.

As this is a very important subject for the consideration of farmers, I hope that the able and experienced writers for your paper will do this subject justice; at the same time I beg that you and your readers will make great allowance for this my first attempt.

ELBA.

THE HARVEST.

The farmers around us, in good earnest, have been securing the abundant crop, the past propitious season has conferred upon them. The past week has secured much of their grain in good condition, many of them having by this time finished. The greater part, we presume, will get through this week. Apart from the heat, they have had altogether "a merry time of it," as in good England of old, and we congratulate them upon the results of their ingathering, which cannot fail to brighten the prospect around them, as well as cheer the heart. Many a country wife may now successfully put in her claim to a trip abroad, and many a lass will find her plea sustained for a new gown or bonnet which otherwise she would not dared to have hoped for. As to the crop, it is every where considered abundant. The ray has partially suffered from the rust, making perhaps only half a crop. But the wheat will more than supply its deficiency. The price hereabouts, spoken of, as far as a disposition exists to buy, may be averaged at about \$1 25. How far it may ultimately vary from this as a medium, a few weeks will determine. The Richmond Whig states that the millers there are buying on the following terms: To be delivered by the 25th July, \$1 50, Do. 31st, \$1 45; Do. 5th August, \$1 40, Do. 10th, \$1 35, Do. 20th, \$1 25, Do. 31st, \$1 10.—*Winchester Virginian*.

A correspondent from Amelia writes us, that the Chinch Bug is doing very great injury to the Corn Crops, in that county. He states, that in one field near him, which but few days ago promised a fine crop, the stalks are now black with the destructive insect, and the fodder is nearly as dry, as that in the barn. He calls upon planters to point out a means of arresting their devastations.—*Rich. Euquiver*.

From the Genesee Farmer.

IS EVERY THING RIGHT?

This is a question which every farmer should put to himself as he commences his labor of the field; for if there is a defect in the beginning, it is possible he may labor on through the whole season to little or no effect.

It is essential to success in farming that there should be a plan; and equally so, that the plan should be a good one. Farming at random is seldom profitable. Every thing should be done by system,—the division and arrangement of the fields; the rotation of the crops; the adaptation of the culture and the crops to the soil, all should be the result of well digested plans, and these plans should be right at first or all will continue to grow wrong.

Are your farming tools in order?—and are they all of good quality? Don't imagine that you are going to save any thing in the end by using worn-out, ill-constructed implements of husbandry. A good plough, harrow, hoe or scythe will pay for themselves in a season by goodness and ease of working, over a clumsy inferior article. Are all these things right.

How are your fences? None of our business some may reply; but it will be the business of your animals, and those of your neighbors to examine them thoroughly before the summer comes round, and if not right they will be sure to find it out, and the report will be accordingly. If any wall has fallen down let it be carefully replaced; if rails have been blown off by the winter wind, see that they are all laid in their place; have stakes been frozen out, drive them over; and remember that most of the neighborhood hard feeling that exists might be prevented by a few hours examination and repair of outside fences. Look to it then that these are right.

Have you made proper provision for the moral and intellectual culture of yourself and family? It is all important that every thing should be right on this point, for in no one would a mistake be so fatal as on this.—Newspapers, books, schools and the religious institutions of society, should be at command and enjoyed, for indolence and inaction is as fatal to the mind as the body, and without sound morals, and general knowledge, no man can be adequately prepared to act his part in a free country and popular government, like ours. Be careful that all is right here, and begrudge not the trifling expenses the attainment of such good may require.

VALUE OF GYPSUM.

Barnabas Miller, of Catharine, Chemung, has sent us the result of some experiments with plaster. A row of potatoes not plastered, yielded 50 pounds of tubers, while a row along side, which he plastered, gave 90 pounds—a difference of nearly one half in favor of the plastered row. Mr. Miller says the difference upon his corn was nearly the same, a table-spoonful being applied to each hill, after the first hoeing. The soil a gravelly loam. Mr. M. recommends the sowing a bushel an acre on grass grounds, about the first of May, and he thinks its benefits are manifest the second season. We join with Mr. M. in begging farmers who do not use plaster, to TRY IT—on their meadows and pastures, on their corn, potatoes, &c,

THE PEACH WORM.

Dr. Scott has furnished us, in the *Plough Boy*, with a description of the habits of the insect which attacks the peach tree about the surface of the ground, and often fatally. The egg is deposited by a large fly, in July, which pierces the outer bark until checked by the cold of winter. Its presence is indicated by the gum which exudes near or at the surface of the ground. The worm resumes its depredations in the spring, and emerges a perfect insect, late in June, or early in July. The doctor's remedy is, to put ashes about the collar, or lower part of the stock, and particularly in the spring. The worm is then below the surface, and the rain, which percolates through the ashes, becomes a ley, which settling into the worm holes, destroys the insect. Whatever prevents the eggs being deposited near the surface, as covering the lower parts of the stock with straw in the spring, so that the frost of winter may destroy the insects ere they penetrate the ground—or whatever will destroy the worm when under the ground, as the alkali of lime, ashes, &c., will preserve the peach tree from the depredations of the insects.

The New Orleans Bulletin has fallen on a way for the South to pay its debts, which it thus explains:

"It is estimated that from the five Southern States of Mississippi, Louisiana, Alabama, Georgia, and South Carolina, fifty thousand persons travel northward every summer for the purpose of recreation and pleasure. To set down the travelling and incidental expenses of this army of tourists at five hundred dollars a head, is a moderate estimate. Many of them, without question, spend their one and two thousands. Add to this five hundred dollars a head laid out in purchases of various kinds, and we have the sum of forty millions of dollars disbursed every year at the North by the travelling gentry from the South. Now, if this immense treasure could for one year be applied to the liquidation of southern debts, instead of the purchase of Northern pleasure, gewgaws, et cetera, it strikes us very forcibly that the people of the five States above mentioned would, at the end of twelve months, find themselves relieved of a heavy weight of indebtedness. An arrangement so desirable can, it is evident, easily be accomplished. All the Southerners have to do is to stay at home; and save travelling expenses."

From the Magazine of Horticulture.

EXPERIMENTS ON THE VEGETATION OF ROSE SEEDS.

BY R. BUIST, FLORIST, &c.

SIR,—Some time last year I observed in your Magazine, a difference of opinion between two of your correspondents, in regard to the vegetating of rose seeds. I then determined on sowing some of the many varieties, and send you the result of my experiments.

No. 1. Seeds of *Rosa indica odorata*, or tea rose, were sown on the first of December, 1837, and vegetated in a temperature of between 58° and 64° Fahr., in from six weeks to three months, coming up occasionally during that period; the

most of them have now bloomed, but not sufficiently strong to determine their character.

No. 2, of the same seed, and picked at the same time, was kept four weeks in sand, and sown on the ninth of January, 1838, and vegetated generally in seven weeks. The plants grew stronger and flowered better than No. 1, although treated in the same manner.

No. 3, seeds of the same, kept in sand till the first of February, and sown in pots and placed in dung or manure hot-bed, vegetated beautifully in six weeks, temperature from 65° to 75° Fahr., and are now promising; in growth, bloom and character, to surpass Nos. 1 and 2.

No. 4, seeds of Lamarque Noisette rose; collected from the plant in the open air in January, 1838, and sown along with those of No. 3, vegetated at the same time and have grown much stronger than any of the preceding, but only as yet three out of four plants have bloomed, and strange as it may appear, (you know the parent to be a large white,) one of those which flowered is a deep rose color and perfectly double. It perhaps may be desirable to say that the soil used was sand, loam, and leaf mould, in equal proportions, and watered with pure river water.

Yours, very truly,

R. BUIST.

Philadelphia, June, 1838.

The above experiments, by so successful a practitioner as Mr. Buist, will at once set at rest all doubts respecting the time usually required to vegetate seeds of roses, of the Chinese varieties. We hope Mr. Boll, or other of our friends, will give us the results of experiments upon the vegetating of hardy rose seeds, which, Mr. Buist thinks, (see vol. III, p. 315,) require a much longer time to vegetate, than the Chinese varieties. The experiments now detailed confirm Mr. Boll's statement, (III, p. 216.) But Mr. Russell, who doubted the blooming of roses, at the early age of four months from the seed, intended his remarks to apply to hardy varieties.

The sport of the progeny of the Lamarque rose, noticed by Mr. Buist, is very remarkable. Such things are frequent in the dahlia, carnation, &c., but are probably rare in the rose. A description of the above named seedlings, would undoubtedly be valuable to our readers, should they prove to be valuable kinds.—*Ed.*

TO IMPROVE GRASS LAND WITHOUT MANURE.

We are informed that a farmer improved his grass land in the following manner:—About the first of July, when the grass had attained a good growth, he ploughed in the grass, which would have produced about a ton of hay to the acre, ploughing it about four inches deep, and turning it completely over smooth and even, as the ground was very even, level, and free from stones. Then he rolled it, to make the turfs lay close, then harrowed it several times to make the soil mellow. Then sowed herd's grass, clover and fowl meadow; the last was sowed by mistake for red top. The herd's grass and fowl meadow have grown very stout, and the clover has grown fine and thick at the bottom. This produced the first and second years, (1836-7,) two tons to the acre. The general produce was not more than half a ton be-

fore ploughing. This soil is too wet for tillage, excepting for ploughing very late and ridging.

[Yankee Farmer.]

Beat this?—On Monday last (the 3th) Dr. Sam'l. D. Martin, of Clarke county, Ky. brought to this city four Heifer Calves, the get of his deservedly celebrated bull, "Dennis de la Motte." We had not the pleasure of seeing them, but were favored with our city weigher's certificate of their age and weight—which we give below:

Nearly, 4 years old, weighs	1305
Mileta, 3 do do	1375
Cimbal, 3 do do	1200
Maria, 3 do do	1195
Aggregate,	5075

The three last were sucking calves. It will be well here to mention, that these calves were travelled from Dr. Martin's farm of this city (a distance of 13 miles) in about 4 hours, and were weighed immediately after reaching here, consequently must have weighed 50 pounds each less than they would have done had they been weighed at the farm.—*Lexington (Ky.) Observer.*

The Farmer.—It does one's heart good to see a merry, round faced farmer; so independent, and yet so free from vanity and pride. So rich and yet so industrious—so patient and persevering in his calling, and yet so kind, social and obliging. There are a thousand traits which light up his noble character. He is hospitable—eat and drink with him, and he won't set a mark on you and sweat it out of you with a double compound interest, as some I have known will—you are welcome. He will do you a kindness without expecting a return by way of compensation—it is not so with every body. He is generally more honest and sincere—less disposed to deal in low underhand cunning, than many I could name. He gives to society its best support—is the firm pillar that supports the edifice of government—he is the lord of nature. Look at him in his homespun and grey black—gentlemen laugh at him if you will—but believe me he can laugh back if he pleases.

HOW TO DESTROY GRUB WORMS.—We have seen the following method in some paper recommended for destroying the common grub or cut worm, which cuts off young cabbages, beets, corn, &c. and think the plan is so reasonable as to be entitled to an experiment. Make a wheel or cylinder pretty heavy, with small blocks of wood projecting from the external surface like cogs, about six inches apart and four inches long. Roll this wheel about towards night amongst the plants. This will make a hard smooth path, with a hole of the size of the cog, every six inches on the way. The worms at night come out in search of plants. They will prefer to crawl along the smooth path made by the wheel till—pop, they fall into the hole. The rest of the night they will busy themselves in ineffectual attempts to get out, and in the morning you may walk along and gather the worms—and destroy them. There is some philosophy in this plan to outwit a worm.—*Augusta Banner.*

[From the Southern Agriculturist.]

PROGNOSTICS OF THE WEATHER.

VII. FROM WINDS.

1. When the wind veers about uncertainly to several points of the compass, rain is pretty sure to follow.

2. Some have remarked, that if the wind, as it veers about, follows the course of the sun, from the East towards the West, it brings fair weather, if the contrary, foul, but there is no sign of rain more infallible, than a whistling or howling noise of the wind.

3. Wind turning to North-East, continuing there two days, without rain, and not turning South the third day, or not raining the third day, will likely continue North-East for 8 or 9 days fair, and then come South again.

4. If it turn again out of the South to the North East with rain, and continue in the North-East two days, without rain, and neither turns south or rains the third day, it is likely to continue North-East two or three months.

5. After a Northerly wind, for the most of two months or more, and then coming South, there are usually three or four fair days at first, and then on the fourth or fifth day comes rain, or else the wind turns North again, and continues dry.

6. If it returns to the South within a day or two, without rain, and turns Northward with rain, and returns to the South in one or two days, as before, two or three times together after this sort, then it is likely to be in the South or South-West two or three months together, as it was in the month before.

7. Fair weather for a week with a Southerly wind, is likely to produce a great drought, if there has been much rain out of the South before. The wind usually turns from the North to South with a quiet wind, without rain; but returns to the North with a strong wind and rain. The strongest wind is, when it turns from South to North by West.

8. If you see a cloud rise against the wind or with wind, when that cloud comes up to you, the wind will blow the same way the cloud came.

9. When the wind varies for a few hours, and afterwards begins to blow constant, it will continue for many days.

10. Whatever wind begins to blow in the morning, usually continues longer than that, which rises in the evening.

11. If the wind be East or North-East in the fore part of the summer, the weather is likely to continue dry, and if Westward towards the end of the summer, then it will also continue dry.

12. If in great rains the winds rise or fall, it signifies the rain will forthwith cease.

13. If the South wind begins for two or three days, the North will suddenly blow after it, but if the North blows for the same number of days, the South will not rise till after the East has blown for some time.

14. A change in the warmth of weather is generally followed by a change of wind.

VIII. METEORS.

When meteors, or the aurora borealis, appear after some warm day, it is generally succeeded by a coldness of the air.

IX. FROM ANIMAL CREATION.

Swallows, when they fly aloft after their prey, a serene sky—when they skim the ground or the water, rain not far off—their appearance a sign of spring set in. When the notes of the whip-poor-will are heard, spring has set in—when sheep wind up the hills in the morning to their pastures, and feed near the top, an indication of the clearing of clouds, or drizzly weather—dogs grow sleepy and stupid before rain, and by refusing their food and eating grass, show their stomachs out of order—water fowl dive and wash themselves more than ordinarily before rain; flies are particularly troublesome, and seem more hungry than usual—toads are seen crawling across the road or beaten path in the evening—moles work harder than usual, and sometimes come forth, so do worms—ants are observed to stir and bustle about, and then return to their burrows—bees stir not far, and betake themselves to their hives—swine discover uneasiness, as do likewise sheep, cows, &c. all appearing more eager in pasture than usual—birds of all sorts are in action, and more earnest after their prey—fleas bite harder than common—spiders crawl abroad. ON THE CONTRARY, spiders webs on the trees, or in the air, indicate fair and hot weather—so do bees; when they fly far and come home late—likewise, a more than usual appearance of glow worms by night. If gnats play up and down in the open air, near sunset, they presage heat, if in the shade, warm and mild showers; but if they join in stinging those that pass by them, cold weather and much rain may be expected. In men, frequently, aches, corns and wounds, are more troublesome, either towards rain or frost. The crow cawing and walking alone on the seashore, or on the banks of rivers or pools, presages rain. Birds that change countries at certain seasons, if they come early, show the temper of the weather, according to the country whence they came; as in winter, woodcocks, pigeons, &c., if they come early, show a cold winter.

X. FROM VEGETABLE CREATION.

1. Most vegetables expand their flowers and down in sun-shiney weather, towards the evening; and against rain close them again—as in the down of Dandelion. The rule is, if the flowers are close shut up, betokens rain; if they are spread abroad, fair weather.

2. All wood, even the hardest and most solid, swells in moist weather.

3. The speedy drying of the earth's surface, is a sign of a Northerly wind and fair weather; and its becoming moist, of a Southerly wind, and rain.

4. When sounds are more plainly heard than usual—rain.

5. If wainscots or walls that used to sweat be be drier than usual in the beginning of winter, or the eaves of houses drop more slowly than ordinary, it portends a hard and frosty winter.

6. When there are but few nuts, cold and wet harvests generally follow: when a great show of them, hot, heavy and dry harvests succeed.

7. If the oak bears much mast, it presages a long and hard winter. The same of hops and haws.

XI. FROM RAIN.*

1. Sudden rains never last long: but when the air grows thick by degress, and the sun, moon

and stars shine dimmer and dimmer, it usually rains six hours.

2. If it begins to rain from the South with a high wind, for two or three hours, and the wind falls, but the rain continues, it is likely to rain twelve hours, or more, and does usually rain until a strong North wind clears the air; these long rains seldom hold above twelve hours.

3. If it begins to rain an hour or two before sun rising, it is likely to be fair before noon, and to continue so that day; but if the rain begins an hour or two after sun-rising, it is likely to rain all that day, except the rainbow be seen before it rains.

XII. FROM SEASONS.

1. Generally a moist and cold summer portends a hard winter.

2. A hot and dry summer and autumn, especially if the heat and drought extend far into September, portend an open beginning of winter, and cold to succeed towards the latter part and beginning of spring.

3. A warm and open winter portends a hot and dry summer, for the vapors disperse into the winter showers; whereas cold and frost keep them in, and convey them to the late spring. So saith my Lord Bacon.

4. A severe autumn denotes a windy winter; a windy winter a rainy spring; a rainy spring a serene summer; a serene summer, a windy autumn; so that the air, in a balance, is seldom debtor to itself; nor do the seasons succeed each other in the same tenor for two years together. So also saith my Lord Bacon.

5. At the beginning of winter, if the South wind blow and then the North, it is likely to be a cold winter; but if the North wind blow first and then the South, it will be a warm and mild winter.

BARNWELL.

*It seems that in any given place, the quantity of rain falling one year with another, has been discovered to be the same, from which fact one might easily anticipate the seasons. This experiment has been tried in not less than thirteen places on the Continent, so as to confirm the rule for forty successive years.

AGRICULTURAL PURSUITS.

The following Resolution and remarks were offered by Dr. Graham of Northampton, at the Health Convention recently held in Boston.

Resolved, That a correct understanding of the science of physiology and of the laws of health, would effectually promote the agricultural and horticultural interests of the community.

"I regret, said Mr. Graham, that in offering the resolution, at this late hour, I find the time too short and the audience too much fatigued, to warrant my making those remarks on it, which its importance demands and my feelings would prompt.

The tilling of the ground is the most natural and the most noble, as well as the healthiest employment of man, and the greatest source of his subsistence and his comfort. Not only, according to sacred history, was the first of our race tillers of the dust of the earth, but every human being ever since, has been the offspring of the

same mother earth: for we are all made of the same dust; all derive our material subsistence from the same bosom of nature.—It is the dust of the earth, incorporated in the vegetable or the animal form, which constitutes our nourishment, and is transmuted into our bodies, from the very commencement to the termination of our bodily existence. But both in its more primitive condition of inorganic matter, and in its various organic revolutions and changes in passing from the earth to the formation of our living bodies, the dust of which we are made, is at every stage—in every form, continually subject to fixed constitutional laws, and hence there are fixed laws of relation between our living bodies and all the forms of matter by which we are sustained, and between these and the earth from which they spring and of which they are composed. It is therefore, an important truth, which human beings ought well to understand, that everything which effects the quality of the soil and the character of its produce, has a most intimate relation, not only to our health of body, but to the general well being of man. Our wheat, our rye, our corn, our potatoes, and every other vegetable substance entering into the food of man, are rendered more or less healthful according as our agricultural and horticultural operations are more or less in conformity with the physiological laws of our nature.

"But interesting as this topic is, I must not on the present occasion extend my remarks. Yet I could wish that every tiller of the ground throughout the world were an enlightened—a thoroughly scientific physiologist. The importance of a liberal education in this class of men has been too greatly overlooked; and hitherto it seems generally to have been thought that the cultivation of the soil requires but a small stock of knowledge, and no scientific attainments, and hence, even in our own agricultural country, the vocation and standing of the farmer have been too commonly considered as less reputable than those of the merchant, the professional man, &c. This is wrong—it ought not so to be. The cultivators of the soil ought always to be regarded as the true nobility of the country, and they ought, therefore, to be among the most intelligent—the most liberally educated—the most extensively scientific members of society. Geology, mineralogy, chemistry, meteorology, botany, zoology, physiology, and other natural sciences, are of more immediate interest to the tillers of the ground than perhaps any other men; and when things are rightly understood and rightly ordered, such qualifications will be the ordinary attributes of our agriculturists, and the tilling of the ground will be regarded as it should be, the noblest and most honorable employment of man."

HEMP AND FLAX.

One of the members of the American Institute, desirous of engaging in the cultivation of hemp and flax, had sought information on the subject in vain. Russia, it is well known, is the head quarters of the world for producing these articles.

It is deemed advisable to endeavor to obtain information from that country. Our worthy President, ever ready to lend his aid in whatever may advance the welfare of his country, forwarded the

following questions to Mr. Clay, late Charge at the Court of St. Petersburg. Through his polite attention the subjoined answers were obtained. As they are derived through a very respectable channel, and from a source capable of affording the best experimental knowledge, we have a confidence that they will be appreciated by our readers.

Cultivation of Hemp and Flax in Russia.

1. Climate, temperature, and soil?
2. Quantity of seed, culture, and time of growth?
3. Mode of taking from the ground, if pulled or cut?
4. Manner of rotting, breaking, and dressing?
5. Quantity of cleaned hemp and flax per acre?
6. Cost of labor, rent of land, per ton?
7. The mean temperature of climate where most extensively grown?
8. What crops precede and succeed the culture of hemp and flax, and if they are grown successively on the same lands, and generally such details as may enable the American cultivator to understand the whole subject?

TIMOTHY DEWEY.

January 9, 1838.

To Gen. James Tallmadge.

Replies to Queries concerning the cultivation of Hemp and Flax in Russia, Jan. 1837.

- | | | |
|--|----------------------------|---------|
| 1. Between 50 and 60 ° N. lat. | } Long winter, dry, steady | } Hemp. |
| 45 and 50 E. long. | | |
| 55 and 60 N. lat. | } Do. do. do. | } Flax. |
| 45 and 50 E. long. | | |
| 2. About 17 bush. to a deciatine, (2400 square fathoms, English, about two and seven tenths English acres.) Sown in June, ripens in September. | } Hemp. | } |
| 11 1.4 Do. do. beginning of June, before hemp. | | |

Time of growth of either does not exceed four months.

Quantity of hemp seed grown, 400, a 700,000 quarters.

Quantity of flax seed grown, 400, a 500,000 quarters.

3. Both pulled.
4. Rotted by sinking it in water—in ponds, lakes, or holes dug for the purpose. It remains in the water from one to three weeks, according to the state of the weather; if warm, less time is required, if cold, more or longer time. Great care must be taken by frequently examining, while steeping, that it does not lay too long, and by that means injure the fibre, in rotting the wood or the stalk. They sometimes rot it in running streams, when there is such near, and it gives the hemp and flax a whiter and cleaner appearance, but is considered to injure the strength of the fibre a little, especially if the stream be rather rapid. When dried, it is bruised in a hollow piece of wood, or trough, to separate the fibre from the wood. I cannot explain the exact process, but all the implements are of wood, in order to preserve the fibre from being cut or torn.

5. This depends so much on the season and the

state of the weather, at the time of rotting, that it varies.

From half a ton to one and a half tons of hemp per deciatine of 2,400 sq. faths.

And from 3 cwt. to half a ton of flax per deciatine of 2,400 sq. fathoms.

6. From twenty-five to forty shillings per ton to clean the raw material, and put it in the usual marketable state. No rent is paid for the land; but a certain extent of land is appropriated to each village or community in common.
7. The hemp is grown principally in the governments of Koorsk, Kalooga, Toola, Olre, Chernigoff and Smolensk. Flax is grown principally in the governments of Novogorod, Pshoff and Lithuania. The temperature of which is cold, that is, the mean temperature, though the short summer, is very hot.
8. With hemp—don't change the crop, but manure well every other year or so. With flax—the ground left fallow for one year in three, or sometimes vary the crop by sowing oats or barley. In hot or dry seasons, the hemp or flax is short and less productive; but in damp and temperate seasons, it attains the greatest perfection.—*Journal of Amer. Institute.*

ON STEEPING SEED CORN.

To prevent birds from pulling up or insects from destroying corn when planted, soak the corn 24 hours in a solution of salt petre and warm water; then, after draining off the water, take three parts tar to two parts of fish oil, warm, and mix them together, and put the mixture on the corn, stirring the corn until the mixtures adhere to and cover the grains; after which it may be rolled in plaster, lime, or ashes, to prevent the grains sticking together when dropping. It is thought the tar prevents too much wet, after planting, from rotting the corn, and oil prevents too much dry weather from drying the tar and thereby forming a crust around the grain that a sprout cannot get through, but both together make the mixture of a proper consistency that retains the moisture, renders the covering soft, and admits the sprout to get through. The above method has been tried a number of years by Mr. Ephraim Clark, a highly respectable farmer of Westfield, N. J., a number of whose neighbors also have tried the same with beneficial results, rarely having had to plant their corn over prepared in this way.

N. B. The same preparation answers well for Lima beans.

The above method was communicated to me by Mr. Ephraim Clark, who gave me permission to send it for publication.

Yours, &c.

WILLIAM MARSH.

Rahway, April 24, 1838.

THE WHEAT CROP AND CHINCH BUG.

I have seen in your paper several very flattering accounts of the present wheat crop. I have no doubt the crop is generally a much larger one than for the last several years; but I am satisfied, in this section it is not so large a one by far, as was generally expected, and as generally reported; for, in the first place, the quantity seeded was

comparatively small, and in the second, it has been visited by an unparalleled number of the Chinch Bug, that has cut it off very considerably.

This formidable little insect is now threatening destruction to our growing crops of Corn. Since the commencement of our harvest, they are here seen by millions of millions, marching in almost solid bodies to our oat and corn fields. Several fields of Corn are already visited by them to an alarming extent, the stalks literally blackened from the ground to the last blade. What extent of mischief they will do, none can say. I am of opinion, that unless we are providentially visited by the finest seasons from this time, our crops of corn will be greatly cut off by them. I would advise farmers to keep a steady watch upon them; to use all means to intercept their march by intrenchments across their paths, so soon as they have collected in quantities; fill up the trench or ditch with leaves, straw, or something of the kind, and burn them up; and repeat it until these armies are broken up. When they have taken to the corn, the best means of destroying them, without injury to the corn, I have ever tried, is, by the use of tolerably strong ley. Take it to the field in vessels; saturate cloths or rags of convenient size in it; then press out the ley from the cloths around the stalk, so it will run down into the boot of the blade and the roots of the stalk where they collect. This is the best remedy I have ever tried, and quickest done; besides, I consider it an advantage to the corn.

There lives in this neighbourhood an old and experienced farmer, who used to be frequently in the field with Mr. Jefferson, and recollects to have heard him say years ago, that if a famine was ever produced in this country, it would be by this little insect, (Chinch Bug.) To witness and hear of the vast numbers that have made their appearance during our harvest in this section, and the threatening aspect they have assumed, I deem a sufficient apology for introducing the opinion above of that truly great man, Mr. Jefferson.

The rapid increase of this insect in the last few years, admonishes us to delay no longer in declaring a war of extermination against them. I have simply thrown out these hints, hoping to call out some older and more experienced farmers upon the subject. Many plans have been adopted for their destruction. I have given the most successful ever tried by myself. I hope some better has been tried before; and that no time will be lost in making the recipe public property through your columns.

Amelia County, Va.

Rich. Enq.

[From the Common School Assistant.]

AGRICULTURE.

How can I make more money from my land? is a question which every farmer should put to himself. The following remarks will aid him in answer:

A great change has been made in cultivating the soil. Twenty or thirty years ago we raised wheat, wheat, wheat—then we raised rye, rye, and a few oats, peas, and buckwheat; and then, in a great many places, we made fuel of our fences, gave our land to the commons, and removed to the West, where again we could raise wheat and then rye, and end with oats and buckwheat.

Such has been our system of agriculture, and such the rotation of crops. But a change has come over the land. We are learning to recover soils, and to raise a greater variety of crops.

By this change in agriculture, the land is made to produce ten times its former yield; and the cultivation of roots is now considered as one of the tests of good farming. Roots prepare the land finely for other crops. They possess the greatest value as an article for food. They form large quantities of manure of the best quality. They enable the farmer to keep ten times the stock that grass would support; and he who neglects roots now, is not a good farmer.

The following will show how much food can be raised from one acre by cultivating roots:

The Messrs. Bullocks, near Albany, from four acres, have taken 4000 bushels of ruta бага. A gentleman in New Jersey, from two acres, had 2000 bushels.

Mr. Bement, of Albany, well known for his patriotic efforts in the cause of agriculture, has produced roots weighing 24½ pounds. Edward Miller, of Albany, has raised at the rate of 1320 bushels per acre. The agent of the Land Company, at Bath, Steuben county, raised at the rate of 1600 bushels per acre. R. Gordon, in the Farmer and Mechanic, states his crop at 1,510 on an acre.

Of the mangel wurtzel crops, of from 1000 to 2000 bushels per acre have been repeatedly raised. It is probable that of this root more tons have been produced on an acre, than of any other. The carrot does not fall much behind the field-beet in productiveness. Mr. Bench, of Marcellus, has raised at the rate of 280 bushels to the acre; and Edward Miller, of Albany county, 1680 bushels. In what other way could we have obtained so much animal food?

It should be remembered that what has been done in cultivating the earth, may be done again; that the productive powers of the soil are not diminished; and more than all, that with 200 bushels of potatoes, 500 of ruta бага, or carrot, and the same of mangel wurtzel to the acre, and suitable soils, these amounts will most surely be exceeded; root crops are far more profitable than any other; corn, or grain, or hay crop.

"What should be the reason," said a respectable farmer, in conversation the other day with another farmer, "that with a less quantity of land under cultivation, you can keep so much more stock in proportion, than I am able to do, and at the same time produce such quantities of grain?"

"My roots do it," was the reply. "I fat my pork on boiled apples and potatoes, finishing with corn or ground barley; I fat my beef on turnips; I feed my horses with turnips or carrots, unless put to hard labor during the winter, when I allow them oats; and I separate early in the season my lambs from the rest of the flock, and feed them with turnips. By adopting this course, I rarely lose an animal, and the expense of keeping my whole stock is materially lessened."

Now will not every man who reads this, consider the subject? Try the experiment. He who suspects all changes, must abide old evils.—Manufactures are improving, education is progressing, and the world is on the advance. If the farmers do not wake up, they will be trodden on and crushed by this march of improvement. The

farmer's profession, in its nature, is the noblest and most independent of any; let it be so in its practice.

INDUSTRY.—The following anecdote may give some encouragement to the industrious husbandman: Not long ago a country gentleman had an estate of £200 a year which he kept in his own hands, until he found himself so much in debt, that, to satisfy his creditors, he was obliged to sell the half and to let the remainder with a farmer for twenty-one years. Towards the expiration of the lease the farmer, coming one day to pay his rent, asked the gentleman whether he would sell the farm. "Why, will you buy it?" said the gentleman. "If you will part with it, and we can agree," replied the farmer. "That is exceedingly strange," said the gentleman. "Pray tell me how it happens that, while I could not live upon twice as much land, for which I pay no rent, you are regularly paying me a hundred a year for your farm, and able, in a few years to purchase it?" "The reason is plain," answered the farmer; "you sat still, and said 'go!' I got up and said 'come;' you lay in bed and enjoyed your estate; I rose in the morning and minded my business."

Silk Ribbon, in great perfection, manufactured by Messrs. S. & T. Whitmarsh, at their factory near South street bridge. The loom used was constructed by Mr. F. Downing, of Enfield, and a more perfect and beautiful piece of machinery we have rarely seen. It is capable of weaving fourteen pieces of ribbon of different widths, at the same time, and it does weave them exquisitely. Some specimens which we have in our possession, the product of this machine, are not surpassed by any ribbon of foreign manufacture. This branch of business, as well as the manufacture of sewing silk, promises to be a very lucrative business to the enterprising proprietors in Northampton.

[Northampton Courier.]

TURNIP SEEDS.

5000 lbs. Turnip Seeds of first quality of the following kinds, will be supplied at the very lowest wholesale rates; which will enable venders to make large profits in selling by the pound, and far larger when selling in smaller parcels.

Purple topped Ruta бага or Yellow Swedish Turnip, White flat Field, White Norfolk, Early White Dutch, Yellow Datch, Yellow Flat Field, Yellow Aberdeen, Large Yellow Bullock, Long Tankard, Yellow Stone, White Stone, Yellow Maltese, Dale's New Yellow Hybrid, Swan's Egg, Red top or Red Round, Green top or Green Round, and others.

Also, for sale, every other kind of Garden, Flower and Agricultural seeds. A liberal credit to venders—and priced catalogues will be sent to all who desire.

N. B. 600,000 Chinese Morus Multicaulis Trees, 3 to 6 feet high, deliverable in October—and 200,000 Morus Expansa, Brussa, and other choice varieties.

WM. PRINCE & SONS,

july 17

St

Flushing, New-York.

DAHLIA ROOTS.

The subscriber can furnish any quantity of DAHLIA ROOTS to the number of one thousand, recommended to be a choice variety, all of the double kind, and from the well known nursery of Samuel Reeves, Esq'r. near Salem, New Jersey. I can also furnish from the same nursery very superior APPLE TREES for spring planting, if orders are given in soon for them. Peach Trees cannot be furnished from the said nursery before next fall.

J. S. EASTMAN.

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every MCDND

	PER	FROM	TO
BEANS, white field,	bushel.	1 25	
CATTLE, or the hoof,	100lbs	8 00	8 75
CORN, yellow	bushel	67	68
White		65	66
COTTON, Virginia,	pound	9	11
North Carolina,	"	10	11
Upland,	"	9 1/2	11
Louisiana — Alabama	"	10	11
FEATHERS,	pound.	48	50
FLAXSEED,	bushel.	1 12	
FLOUR & MEAL—Best wh. wh't fam.	barrel.	10 00	
Do. do. baker's	"		
SuperHow. st. from stores	"	7 25	7 50
" wagon price,	"	7 00	
City Mills, super.	"	7 50	
" extra	"	8 00	
Susquehanna,	"	7 00	
Rye,	"	4 37	4 50
Kiln-dried Meal, in hhds.	hhd.		
do. in bbls.	bbl.		
GRASS SEEDS, wholes. red Clover,	bushel.		
Kentucky blue	"	2 50	3 00
Timothy (herds of the north)	"	2 25	2 50
Orchard,	"	2 00	2 50
Tall meadow Oat,	"		3 00
Herds, or red top,	"	90	1 00
HAY, in bulk,	ton.	10 00	15 00
HEMP, country, dew rotted,	pound.	8	7
" water rotted,	"	7	
HOGS, on the hoof,	100lb.	7 00	
Slaughtered,			
HOPS—first sort,	pound.	9	
second,	"	7	
refuse,	"	5	
LIME,	bushel.	33	34
MUSTARD SEED, Domestic, —; blk.	"	3 50	4 00
OATS,	"	25	
PEAS, red eye,	bushel.		1 12
Black eye,	"	1 00	1 12
Lady,	"		
PLASTER PARIS, in the stone, cargo,	ton.	3 50	3 75
Ground,	barrel.	1 50	
PALMA CHRISTA BEAN,	bushel.		
RAGS,	pound.	3	4
RYE,	bushel.	65	66
Susquehanna,	"		none
TOBACCO, crop, common,	100lbs	3 50	4 50
brown and red,	"	4 00	6 00
fine red,	"	8 00	10 00
wrappery, suitable	"		
for segars,	"	10 00	20 00
yellow and red,	"	8 00	10 00
good yellow,	"	8 00	12 00
fine yellow,	"	12 00	16 00
Seconds, as in quality,	"		
ground leaf,	"		
Virginia,	"	4 50	6 00
Rappahannock,	"		
Kentucky,	"	5 00	8 00
WHEAT, white,	bushel.	1 40	1 55
Red, best	"	1 40	1 55
Maryland	"	1 30	1 40
WHISKEY, 1st pf. in bbls.	gallon.	33	33 1/2
" in hhds.	"	31	
wagon price,	bbls		
WAGON FREIGHTS, to Pittsburgh, .	100 lbs	1 75	
To Wheeling,	"	1 50	
WOOL, Prime & Saxon Fleeces, ...	pound.	40 to 50	20 22
Full Merino,	"	35	40 18 20
Three fourths Merino,	"	30	35 18 20
One half do.	"	25	30 18 20
Common & one fourth Meri.	"	25	30 18 20
Pulled,	"	28	30 18 20

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,	barrel.		
BACON, hams, new, Balt. cured...	pound.	13	13 1/2
Shoulders, ... do.	"	11 1/2	12
Middlings, ... do.	"	11 1/2	12
Assorted, country,	"	9 1/2	10
BUTTER, printed, in lbs. & half lbs.	"	20	25
Roll,	"		
CIDER,	barrel.		
CALVES, three to six weeks old...	each.	5 00	6 00
Cows, new milch,	"	25 00	40 00
Dry,	"	12 00	15 00
CORN MEAL, for family use,	100lbs.	1 62	
CHOP RYE,	"	1 50	1 60
EGGS,	dozen.	12	
FISH, Shad, No. 1, Susquehanna,	barrel.	9 75 1/2	10 00
No. 2,	"	9 50	
Herrings, salted, No. 1,	"	4 25	4 75
Mackerel, No. 1, ——— No. 2	"		
No. 3,	"		
Cod, salted,	cwt.	3 00	3 25
LARD,	pound.	10	11

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

U. S. Bank,par	VIRGINIA.
Branch at Baltimore,do	Farmers Bank of Virgi. 1½
Other Branches,do	Bank of Virginia,do
MARYLAND.	Branch at Fredericksburg, do
Banks in Baltimore,par	Petersburg,do
Hagerstown,¾a	Norfolk,do
Frederick,do	Winchester,do
Westminster,do	Lynchburg,do
Farmers' Bank of Mary'd, do	Danville,do
Do. payable at Easton, ...do	Bank of Valley, Winch. par
Salisbury, 1 per ct. dis.	Branch at Romney, ... par
Cumberland, par	Do. Charlestown, par
Millington,do	Do. Leesburg, 1½
DISTRICT.	Wheeling Banks, 3¾a 4
Washington, } Banks, ½p.c.	Ohio Banks, generally 5a 6
Georgetown, } Banks, ½p.c.	New Jersey Banksgen. 3
Alexandria, }	New York City, par
PENNSYLVANIA.	New York State, do
Philadelphia,par	Massachusetts,1½a 2
Chambersburg,½	Connecticut,1½a 2
Gettysburgdo	New Hampshire,1½a 2
Pittsburg, 2½	Maine,1½a 2
York,¾	Rhode Island,1½a 2
Other Pennsylvania Bks. 2	North Carolina, 5
Delaware [under \$5] 4	South Carolina, 6a 7
Do. [over 5] 1½	Georgia,8a 10
Michigan Banks,10	New Orleans,8a 10
Canadian do.10	

FOR SALE,

Two superior DEVON bulls, 4 years old this spring, of the purest blood in the country. fine form and remarkably large. Any gentleman wishing to procure one will find it to his advantage to embrace the present opportunity, as they will be sold at the low price of \$100 each, deliverable in Baltimore.

Applications in writing, post paid, to be made to the subscriber.

EDWD. P. ROBERTS, Baltimore, Md.

may 29

3t

FARMERS' REPOSITORY OF AGRICULTURAL IMPLEMENTS AND EASTMAN'S CYLINDRICAL STRAW CUTTERS IMPROVED.

THE Subscriber informs the public that he has secured by letters patent his late and very important improvements on his Cylindrical Straw Cutter, by which improvements they are made more durable and easier kept in order. All the machinery being secured to an iron frame the shrinkage, wear and decay of wood is avoided. The feeding part of his improved machine is upon an entire different principle from the former machine; far more durable, requiring neither skill or care to keep it in order. These machines are so constructed as to make the freight on them less than half what it cost to ship the former or wood machines, an important desideratum to purchasers living at a distance; and I now offer it to the public upon

the credit of my establishment as the most perfect machine in existence for the same purpose. They are also adapted to cutting rags for paper making, and for cutting tobacco as manufactured by Tobaccoists, &c.

I also keep these machines on hand made as heretofore with my new feeding machinery attached to them; and also a general assortment of Agricultural Implements, as usual. Elliott's Horizontal Wheat Fans, and Fox & Boardland's Threshing Machines are both superior articles.

My stock of Ploughs on hand are not equalled in this city either for quality, quantity, or variety. I have a large assortment of Plough Castings at retail or by the ton, and having an Iron Foundry attached to my establishment can furnish any kind of Plough or Machine Castings on reasonable terms and at a short notice.

All repairs done with punctuality and neatness. On hand, a few Patent Lime Spreaders, Horse Powers, &c. &c.

Also just received, a fresh supply of Landreth's superior Garden Seeds. In store, superior Timothy and Orchard Grass Seed and Seed Oats. All implements in the agricultural line will be furnished by the subscriber, as good and on as reasonable terms as can be had in this city, with a liberal deduction to wholesale purchasers. Likewise will receive orders for Fruit Trees from Mr. S. Reeves' Nursery, New Jersey.

JONATHAN S. EASTMAN,

Pratt street, Baltimore,

feb 20

Between Charles & Hanover sts

TO THE PUBLIC.

Try the New Agricultural Establishment in Grant-street, next door to Dinsmore and Kyle.

Every article warranted to be first rate. The subscribers, grateful for past favors, take this early opportunity of returning their thanks to their customers and the public in general, and beg leave to inform them that they are now provided with a very extensive stock of newly manufactured AGRICULTURAL IMPLEMENTS, suitable to meet the call of Farmers, Gardeners, Merchants, Captains of vessels, and others, viz: 1000 Ploughs, assorted sizes, from \$4 to \$15 each, comprising of the old common Bar Shear, Winand's Self Sharpener; Woods & Freeborn's patent, all sizes, "Davis," "Sinclair & Moore's" improved Hill Side Ploughs, highly esteemed for turning the furrow down hill, with wrought or cast shears; Wheat Fans, of various sizes and patterns, from \$15 to \$50 each, warranted to separate the garlic from the wheat; Corn Shellers, from \$12 to \$20; Cutting Boxes, from \$7 to \$50 each; Corn and Tobacco Cultivators, large and small; Expanding do., Wheat Cradles, warranted to have fingers of the natural growth, and Grass Seythes, &c. &c.; Castings, of all descriptions and patterns, by the lb. or ton, to suit customers, allowing a liberal discount to merchants buying to sell again—all of which will be furnished on the most pleasing terms and every article warranted to be of the best quality, in proportion to the cost price. All orders by mail or otherwise shall be duly attended to with the greatest despatch.

We would particularly call the attention of Country Merchants and others, wishing to purchase agricultural implements to sell again, to the fact, that we will furnish them with articles on better terms than they can be supplied at any other establishment in the city. Our assortment is complete and as varied as that of the most extensive concern in Baltimore.

We have also connected in its operations with the above branch of business a complete assortment of FIELD AND GARDEN SEEDS, kept by Thomas Denny—Also Garden and Farm Tools, of various sorts and of the choicest collection, which will enable our customers to have filled entire all orders in the Agricultural and Seed Departments. mh 26 JOHN T. DURDING & Co.

CONTENTS OF THIS NUMBER.

Soap suds in aid of manure—burnt clay for light soils—method of destroying the chrysalis of the silk worm—Orange Farm—on rearing mocking birds—mud as a manure—charcoal a dressing for onions—on the time for cutting grass—the harvest and prices of wheat in Virginia—ravages of the chinch bug—hints for the farmer—value of gypsum—the peach worm and remedy—a way for southerners to pay their debts—experiments on the vegetation of rose seeds—to improve grass land without manure—large calves—the farmer's state—to destroy grub worms—prognostics of the weather, concluded—agricultural pursuits—cultivation of hemp and flax in Russia—curative for the chinch bug—hints to agriculturists—value of industry—manufacture of silk ribbon—prices current, &c.

MORUS MULTICAULIS TREES.

The subscriber has from 25,000, to 30,000 Morus Multicaulis trees now growing at his residence, with roots of 1, 2, and 3 years old, which will be ready for sale this fall, and which he will sell on moderate terms.

EDWARD P. ROBERTS.

THE FARMER & GARDENER

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, E. P. ROBERTS AND SAMUEL SANDS—EDITED BY E. P. ROBERTS.

No. 14.

BALTIMORE, MD. JULY 31, 1838.

Vol. V.

THIS publication is the successor of the late

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BALTIMORE: TUESDAY, JULY 31, 1838.

The communication of our correspondent "A." on the diseases of the Peach Tree, will elicit attention. It is written by a genuine friend of the soil, who has, in his day, "done the state" much "service."

Our esteemed friend and correspondent, Mr. John Smith, of Dardenne, Missouri, will accept our thanks for his valuable communication. It will be found in another column, and will amply repay the reader for the time he may devote to its perusal. His remarks on the management of Apple trees, and the cure of the blight in Pear trees, are truly interesting. From experience we can affirm that his remedy for blight is *effectual* when resorted to in the early stage of the disease—and we will go further and say, that we believe it the only one which is really so.

The communication, which we insert to-day, of "Observer," is from the pen of a distinguished Southern gentleman, whose bird's eye view of a trip from Baltimore to Frederick, we need not add, shows that he improved the opportunity afforded by his journey of making many important observations, upon the manufacturing and agricultural resources of the country through which he passed. The remarks he has made upon the facilities and advantages of irrigation are important, and we trust will be improved by the proprietors of the lands, as should they act upon his suggestions they will greatly add to the value of their meadows.

The Drought—We have been now without rain for three weeks, and should the drought continue much longer we fear that the crops of corn and potatoes in this region will be very materially injured. The corn being in silk, is in that state to require moisture to enable it to fill, will without it not more than half perform that office—and as every body knows, without rain, and a plenty of it, the potatoes will not form their roots.

Buckwheat—We would again advise our readers to put in a patch of this grain, as there is still time for it to mature. Last year we put in some as late as the 8th of August, and got a very good yield. We mention this not as an exemplar, but to show that it is not too late, for our opinion is, that it is always best to get it in from the 1st to the 10th of July.

Timothy grounds—It is time now to be getting the grounds you intend for timothy ready, and let us advise you to bestir yourself.

CULTURE OF TURNIPS.

As the season has arrived when this root should be put in, and as from present prospects the potato crops have been materially injured by the long continued drought, we would earnestly advise that much larger crops of turnips be put in by every one than is customary. We are aware that this is an uncertain crop; but then what is there in the whole range of agricultural products that is not so. With care and attention in the preparation of the soil and proper after culture, we entertain no doubt that it may not only be rendered a *certain* but a profitable crop. Without indulging in any extravagant, or over sanguine calculations, we are fully persuaded that five hundred bushels may be raised on an acre, and we are sure that there are few other products that will pay as well. Let us then give a few directions with respect to their culture. Turnips, as every one knows, is a root that requires the soil to be well prepared. The ground should be ploughed deep and thoroughly mellowed and pulverized. Three ploughings and as many harrowings would not be too much.—Previous to the last ploughing let 20 double cartloads of cow, hog or other short manure be spread on the ground. This should be carefully performed in order that the manure be equally distributed over the ground, and in order that no loss by evaporation accrue, a person should be employed to spread the manure, (which should be previously in proper sized piles on the ground) as the ploughman turns up the furrows. This can be done by the spreader taking the circuit of the land. Let this manure be turned in 7 or 8 inches. After the ground is ploughed, put on the harrow, and have the ground first harrowed as the

furrows were run, and then cross harrow. The ground being thus finely pulverized, put on 100 bushels of ashes to the acre, taking care to spread it evenly: then lightly harrow the ground so as to cover the ashes. The ground being thus prepared will be in good condition to receive the seed; when they should be sown, in the proportion of 2 lbs. to the acre. If the ground has not been previously limed, sow 10 bushels of lime to the acre, then brush in the seed and lime, and roll the ground with a light roller. When the plants first come up, mix one bushel of plaster and 6lbs. of flour of sulphur together, and sow the mixture on them, while the dew is on the ground. This mixture will have the two-fold effect of giving the plants an early start, and of placing them out of the way of those insects which usually destroy them.

When the leaves of the plants are of the size of a dollar, run a light harrow through them: by this operation you will destroy the grass and weeds, thin out many of the superfluous plants, and give the remaining ones a better chance of growing, which will thus receive a cultivation at a very necessary period. As soon as the roots get the size of a walnut, put a few careful hands in with well sharpened hoes, and let them thin out your turnips to about six inches apart. In about a week from this, the turnips should be again hoed, so as to extirpate all the weeds and grass. After this the shade afforded by the plants will keep down the growth of grass and weeds, and all the subsequent culture necessary, will be to thin out the turnips, should they be too thick, with the hand,—and as they will, by this time, be large enough to feed out to your stock, the labor will be thus repaid.

Bone-dust, or ground bones, where they can be obtained, in the proportion of 20 bushels to the acre, is a first rate manure for turnips. Common salt, in the proportion of 10 bushels to the acre has also been found excellent. Both to be used as a top-dressing.

Silk Culture in New Jersey.—The Princeton Whig says, that Mr. A. M. Jerome, of that borough, has one million of silk worms feeding, and about one hundred thousand of the Chinese Mulberry trees, (*Morus Multicaulis*), in a fine thrifty condition; and that several other citizens in that vicinity are turning their attention to the silk business.

[For the Farmer and Gardener.]

PEACH TREES.

The speedy decay of these valuable trees is a subject of general complaint, and deters many persons from attempting the cultivation of them. If their health and continued productiveness could be secured, there is scarcely any fruit that would so amply reward the cultivator. It seems to me that if proper attention were given to ascertain the cause of the injury, there could not be much difficulty in applying a remedy.

The principal injury complained of, is occasioned by the worm in the root; and from what I have observed of this worm and the insect from which it proceeds, I have no doubt that with proper care and attention the trees may be effectually protected. The insect is shaped somewhat like a wasp, but much smaller. The male and female are different in appearance: the one is black with a yellow ring around the body—the other is lighter, with transparent wings. The female deposits her eggs on the bark of the root if exposed, or of the tree near the surface of the earth. The worm is soon hatched, and immediately begins to penetrate the bark, which is its proper food. At first it is very small, not larger than a pin's point, but grows rapidly, and before the next spring many will be found nearly an inch long—When the worm has arrived at maturity and is about to pass into the chrysalis state, it forms around itself a covering of bits of bark and gum, in which it is completely encased, and so remains until it comes out a full grown insect, takes wing, and soon proceeds to deposit its eggs. Any person who wishes to examine them, may find the chrysalides, by digging carefully about the root of a tree infested with worms; and by placing them under a tumbler, and keeping them a short time, he will have an opportunity of seeing the insect, and will be better satisfied, than with any description of it. The proper food of the larvæ of this insect is the bark of the root of the peach and some other trees; and its instinct leads it to deposit its eggs where the larvæ as soon as hatched may begin to feed—that is, on the roots, or as near to them as they can get, preferring most probably the tender bark of the young trees.

If this be the true origin of the worm, ingenuity and perseverance may certainly guard against its ravages. One obvious method is to cover the trees for a foot or more above the surface with coarse paper, or some other substance, so as to prevent access of the insect to the root, and some distance above it. Another would be, frequently to scrub or wash that part of the tree, so as to remove or destroy the eggs, before they have hatched, and the young worms have burrowed into the bark: or some substance may be discovered so offensive to the insect, as to prevent its approach to this part of the tree when covered with it. By these or some other more effectual methods there is no doubt the peach tree may be protected from the ravages of this destructive worm. It will be necessary to use these precautions during the months when the insects are on the wing and depositing their eggs: probably from April to July or August. This may be ascertained by close observation. A.

A truly great man borrows no lustre from splendid ancestry.

DARDENNE P. O. Mo. July 9th, 1838.

To the Editor of the Farmer and Gardener—

As you have published nothing in your journal this season on the subject of the crops and the prospects of agriculturists of this region, and as it is probable you have not received any direct communication on that subject, I take it for granted that a communication from me will be acceptable, and therefore set about the performance of the task.

The past winter was one of great and sudden vicissitudes; the fore part of it generally warm and exceedingly wet, with occasional pretty hard freezing and sudden thawing; but the latter part of the winter, say from the 1st of February until the latter part of March, was the coldest that has ever been known here at that season of the year. There was a very large wheat crop put in in this region, and I believe generally throughout the state; in this county more than double the quantity ever sown before; it was generally put in early and in first rate order; some crops, however, were unavoidably sown in October, and all crops sown as late as the second week of that month, were much damaged by heaving out in the winter, while all the early sown crops except two or three within my knowledge stood the winter entirely well; but the spring was rather unfavorable for bringing on crops of any kind, the weather from about the 8th April until the 6th June being the coldest, the windiest, and the frostiest ever known in this climate, and withal quite dry.—From the date last mentioned, up to this time, the weather has been entirely propitious; just every thing that the farmer could desire, and crops of all kinds have progressed and flourished beyond all former example. The *wheat crop, on the whole, is a most abundant one, and very superior in quality*; a large majority of it now harvested. Rye is not extensively cultivated here, but the crop of the present season is the best the country has ever produced, and the oat crop, although not yet come to maturity, is unusually promising.

The corn crop of this whole region, as far as I have heard from, in all directions, east, west, north and south, is decidedly the best we have had for many years; perhaps the most promising ever produced in the country, taking the whole country together. The season has been unusually favorable for tillage; the spring being cool and rather dry, afforded ample opportunities to put our corn ground in good condition to support the crop, and those opportunities so rarely occurring of late years, were generally embraced by our farmers, and our corn lands are, therefore, in, perhaps, the best condition now for maturing the crop that I have ever seen them. We have in this county an immense quantity of the very richest kind of bottom land: we are situated in the points between the Missouri rivers, and the low grounds on both of these rivers are broad and extensive; generally on the *Mississippi*, the low grounds are from 4 to 6 miles wide, and on the *Missouri*, generally about two miles, with a solid body of bottom land at the junction of the two rivers of more than twenty miles in length, and having an average width of 7 or 8 miles. There are also several creeks of some magnitude discharging themselves into these rivers in this country, and affording extensive bottoms of most excellent

quality; if all of which could be brought into a judicious state of cultivation, it would, I hesitate not to say, furnish bread for the entire present population of the state; but, perhaps, nineteen-twentieths of this rich soil is yet in a state of nature, and unproductive, except in pasturage, which we do not need for our stock, or which at least we could very well do without. I would here remark, that I think emigrants to this state from the east overlook and undervalue this country; the current having set in for the upper counties, carries the mass of emigrants with it, who seem to suppose they are not in Missouri until they have at least reached the Boon's Lick country; but of this, perhaps, enough is said.

There is but a scanty crop of fruit in this country the present season; there was such a superabundant apple crop last season, that it required all the energies of the trees to mature, and there were consequently very few blossom-buds produced, and the spring was so frosty, cold and windy, that what little there was, mostly perished, and the stone fruits, though the bloom was abundant, shared pretty much the same fate; though on our highest ridges, we have tolerable crops of most of the fruits we cultivate; and while on the subject of fruits, I will mention a fact, which may turn out to be valuable to fruit raisers.

It is generally known that Apple trees constitutionally, or accidentally, become decidedly *biennial* in their fruit-bearing habits, and that different varieties hit on different years in producing crops; now I have two or three trees that have been bearing for several years, and are decidedly biennial in their bearing—into these trees I accidentally budded or inoculated different varieties, that happened to hit on the alternate years in producing their fruit, and the inoculated branches have produced good and full annual crops of fruit for several years past, and ever since they commenced bearing. I do not pretend to say that this will always be the result of such crossing; but my accidental success will, I hope, induce some who have leisure and taste to test the matter by a thorough experiment. It would be desirable to have annual instead of biennial crops of all our choice varieties of apples.

Much has been written and published on the subject of blight in pear trees, and as I have had some experience in the matter, I will give you my practice without pretending to theorize on the subject. In 1832 or 33, that disease made its appearance in the only bearing tree I then had; it had borne three or four pretty good crops, and blight attacked it in fruit time, and about half-way up the lap or top, two or three branches near together being attacked about the same time. I was then ignorant of the disease and supposed these branches had been wounded by the family in climbing after fruit, and did not arrest the disease; but in a few weeks many other branches were attacked, and the whole upper portion of the tree from the spot first infected, upward, put on a sickly appearance, and gave unequivocal signs of speedy dissolution; I did nothing that Fall, for I did not know what to do. The next spring I commenced operations. (the lower branches and trunk still surviving;) by amputating the dead top and shaving off the epidermis from the trunk, which I found to be much diseased and dead in many places; but the disease had progressed too

far, having reached the ground on one side and within a foot of the ground on the other side of the tree; I then sawed off, sloping downwards towards the diseased side, and wrapped over the stump with a weather-proof composition, and have now a beautiful young tree growing from the south sound side of the stump, healthy and thrifty. I had no other tree of this variety, and this may account for my pains. The next season blight made its appearance in another tree of the same age of the above; but which had not commenced bearing, and I commenced amputating, but not until it had spread extensively, and succeeded in saving the stock, but lost the whole top: and this tree is now healthy, and has made another respectable top. These were both raised from sprouts, and so far might seem to establish the theory of Mr. R. J. Curtis, as published in the 8th No. of the current volume of the F. & G.—The next season thereafter, the same disease, most distinctly marked, attacked another and much younger tree, the stock of which was a seedling raised by myself, and with my own hands transplanted when quite small, with its roots entire, and afterwards budded with a choice variety of fruit, obtained from an acquaintance: by this time I was on the alert, and detected the enemy at the critical moment of attack, and as I have partially succeeded in my former experiments and exactly in proportion to the stage of the disease, at which I commenced operations, I applied the knife in due time in this case, and succeeded completely, only the one limb having been affected in the slightest degree; and this I took care to prune away to where the wood was perfectly sound—Since that time, no symptom of the disease has appeared, and I am reaping the rich harvests of golden fruit, to repay me for my care and trouble. Make what disposition of this you think proper, and I shall be content.

Yours, &c.

JOHN SMITH.

To the Editor of the Farmer and Gardener:

Dear Sir—You would not go with me to Frederick, and as a punishment you must permit me to hold you by the button till I give you a bird's eye view of my trip.

The Rail Road, as every body knows, runs for forty or fifty miles between two precipitous ridges, and immediately on the banks of the Patapsco.

The first thing that arrests the attention of the passenger, is the immense unemployed water power of that river. Judging by the eye, I think there can scarcely be a fall of less than thirty feet to the mile on the whole distance. At this very dry season, there is water sufficient to operate a cotton or woolen manufactory, forty miles above Baltimore. The banks of the river furnish materials for dams and building in exhaustless abundance. I know no stream on which manufactories could be erected with an expense so small. It is very narrow in its whole length, and the banks of rock furnishing the best security against destruction by freshets. Though well acquainted in New England, I know no river "all the way down east" that has a water power equal to your neglected Patapsco.

With a finer climate, a healthful region, a Railroad at the door of every mill that might be erec-

ted, and the enterprising Baltimoreans for its neighbors, pray tell me how it is, that so much power is permitted to lie dormant?

Let me guess. In the first place I guess it has not attracted sufficient attention, and then again I guess that the owners of the lands place too high an estimate on scites, and thus repress enterprise, and by demanding more than their value, permit their avarice to defeat its own object.

The road running as it does between high and precipitous hills, allows the traveller very little opportunity of viewing agricultural operations.—Until within some six or eight miles of Frederick the general aspect of the country is rather poor; but here again I noticed the great waste of water power in a way that no one ever seems to have dreamed of in this "good State." You are almost every mile passing little rivulets that come tumbling down the mountain side through a parched and arid soil, which with a very inconsiderable expense, might be made to irrigate its banks for a great distance, and render it verdant and fruitful. Has no one in Maryland ever thought of diverting a small stream from its natural course, or of taking a portion of a larger one for the purpose of watering the adjacent lands.

The process is simple. Raise a dam to any convenient height—dig a ditch in such direction as to suffer the water to escape from it so as to spread over as large a surface as may be. When not needed, it may easily be turned into its natural channel. I suppose no attempt will be made, until some farmer who has courage enough to be laughed at by his neighbors, makes the trial. But remember what I say. The first experiment will succeed better than some that have originated with a more illustrious individual.

When your able Geologist gets into the "hill countries," he will, by uniting Hydrostatics with Geology, show your farmers how to tap their hills, and make fine grass meadows on the most barren waste.

Whilst I am finding fault, let me tell you that your farmers permit their grass to stand too long. Timothy though a fine hay if cut at proper time, is very poor when it stands too long. This I observe is a very general fault.

I have said that the aspect of the country is rather poor until we approach within a few miles of Frederick; but here it is "tout au contraire." I think I have never seen a more beautiful and fertile tract—surrounded on all sides by mountains, just distant enough to conceal their rugged asperities, yet near enough to exhibit in full prospect their general outline, with a surrounding country smiling in all the gay luxuriance of plenty, whilst in the centre of this enchanting valley, the neat town of Frederick raises its glittering spires. Fertility, health and beautiful scenery unite in rendering Frederick one of the most delightful residences I have ever seen. And as a matter not to be disregarded by the "wayfaring man," permit me to recommend the United States Hotel kept by Mr. Roberts, as worth a day's delay on the road.—Prompt and cheerful attention, a table fit for a prince, clean rooms, and if you wish a saddle horse for a morning ride, and good gentle gig horses to give madam an airing in the morning, are among the conveniences afforded. I am sorry to be obliged to add that a severe drought is now prevailing, which has done much injury to the potato

crop, and corn is beginning to suffer. The wheat crop is secured, and said to be much above an average crop. This is not only a fine section of country, but very well cultivated in general. I have here, however to remark the same fault I have before pointed out, as to the time of cutting hay, and the same general inattention to irrigation. The vicinity of Frederick does not afford all the advantages of watering meadows that can be obtained in a more broken country; but here much may be done; and if you will call their attention to it, I think you will find the farmers of Frederick will profit by this hint.

I perceive that the farmers here understand the advantages of keeping cattle out of oat and wheat fields after cutting the grain. In the whole region I saw no cattle upon those grounds. I perceive that some of your correspondents complain that oats impoverish the land. Let me tell you the secret. After cutting the crop their whole stock is turned in "to eat up every green thing." This exposes the naked earth to the scorching rays of an August sun, and greatly impairs its fertility. I have in six years added more than fifty per cent to the product of a field by the following process:—I sowed oats, and after cutting, suffered nothing but hogs to go to the field, and the next year planted corn. This process I have continued for six years—that is, I have had three alternations, and without any other means of fertilizing it, each succeeding crop had exhibited an increase of one-fourth upon its predecessor.

Lest you pull off your button I will now let you go.

OBSERVER.

For the Farmer and Gardener.

THINGS THAT ARE WRONG.

1. It is *wrong* when a stray horse comes to your farm, to work him so long as you can do so upon the food furnished by your pastures; *first*, because the law makes it your duty to advertise him within *five days* under a *penalty of ten pounds*—*secondly*, because by such withholding of the information from his owner, you give him a vast amount of uneasiness, and do him an immense injury, by depriving him of his services—and, *thirdly*, because you reverse the golden rule of doing unto others as you would they should do unto you.

2. It is *wrong* if a stray cow comes to your farm, to keep her whilever she gives a good pail of milk before you advertise her, through the dishonest motive of appropriating another's property to your own use. Conventional law renders this thing a penal offence, and moral duty makes it a fraud.

A MARYLAND FARMER.

Drought.—We learn that a very severe drought prevails over a great part of Long Island, as well as along the shore of the main land. A Long Island farmer who last year raised 700 bushels of potatoes, says he shall have none this year, worthy of the name, unless there should be rains very shortly, and that his corn is not in a much better condition. The wheat, having had nothing to do but ripen after the dry weather commenced, is superb. There was a large fire on the Northern part of Long Island, nearly opposite New Haven, on Thursday or Friday night of last week, which continued for many hours.—Journal of Commerce.

From the Genesee Farmer.

SHEARING OF SHEEP.

Mr. Editor,—For myself, I thank you, as well as your correspondent 'M' of Onondaga, for your courteous and commendatory remarks in reference to the essays I have contributed to the Genesee Farmer, on the subject of "Protection of Sheep," &c. &c. I was fearful, sir, that yourself partook of the general listlessness, which at present unfortunately prevails relative to the great interest of wool growing; and accordingly, I had resolved to defer any further efforts to promote sheep husbandry until a more propitious time. I am happy that I am mistaken;—your remarks caused no ordinary gratification, for the reason, that I may, at least, infer, my sentiments, based as they are entirely upon facts, have been well received by your numerous readers, and will operate beneficially. I arrogate to myself no claim to any new discoveries, but have merely followed the lights which others have set up;—my object is, only, to bear testimony to the correct bearings of those lights, which, I can assure my agricultural brethren, will invariably lead to the harbor of *true interest*.

I will now make some remarks on the subject of *shearing of sheep*, and other matters connected therewith; and, as you have invited from your correspondents plans and descriptions of "farm buildings," I will, in my next, present you with that of my shearing establishment and the necessary appendages.

In reference to shearers—myself, and doubtless very many others, have marked, how *rare* is a *good shearer*. This, considering the aptness and skill of our countrymen in the mechanic arts, and, I may say, in all the diversified divisions of labor, has struck me as somewhat singular. I shall not attempt to account for it, but to obviate the *scarcity* of shearers,—it has been my practice for many years to learn some of my monthly laborers this important art. The first point was to learn them *how* to catch a sheep, and bring it upon the floor, which, I am free to say, not one in five hundred understands. I shall not attempt to describe the common and inhuman method, which might, however, be well compared to a dog dragging a wood chuck from his burrow,—my way is, to throw the right arm around the body of the animal, and grasp with the hand the brisket, then lift it, and with the left take every thing from the feet, particularly straw, which, otherwise, finds its way upon the floor and thence into the fleece.—This is one of the *sorts of hair*, which, too often, is found in the *butter*. [Vide the anecdote of the traveller.]

The next step is to learn him how to hold and turn his sheep in progress of shearing it, to prevent the fleece from being torn, which, being so, makes it more difficult to do up right. I would not recommend you to allow your pupils to shear beyond ten or fifteen the first or second day; let him take it easy, otherwise he will complain of shearing being a back-breaking business; and if he contracts a dislike to it, you may give up all hopes of his ever arriving at skillfulness. By adopting a judicious course, you will fetch him under the yoke. For instance—last year one of my monthly hands, who was altogether unacquainted with the art of shearing, began and sheared fifteen the first day, and exciting his ambition by encour-

aging words, before the conclusion of shearing he accomplished double that number; and this season the same hand sheared forty per day and performed his work admirably. This is only one of several instances which was followed with like success.

Now it is the practice of the great majority of wool growers to employ only those who understand the art already; if we *all* did so, when decrepitude and death had thinned their ranks, where would you look for shearers. One of my neighbors told me, "that he could not learn any of his laborers to catch a sheep, much less to shear it." "Don't be so particular," said I, "all beginners are bunglers, and become expert and skilful only by practice; instead of fretting and scolding, speak kindly and encouragingly—say to him, the second was sheared a little better than the first, and the third better than the second, and so forth. It appears to me, Mr. Editor, if the policy I have adopted and recommend could become general, we should remedy the evil, in very many instances, of allowing sheep to run too long after washing, which arises from not being able to obtain the "right sort of shearers" in seasonable time.

Too many farmers are apt to appreciate a shearer in proportion to the number of fleeces he takes off in a day, not being particular *how* it is done. This is a wrong standard to estimate a good shearer. The most skilful man at this business, is he who will shear about forty per day—cuts the wool at one clip of the shears, and not in twain, as one shearing too fast will do—leaves the least wool—shears most even, and cuts the skin the least: one that will do all this is a good shearer. On the contrary, if a man attempts to shear much beyond the above number, he will be certain to leave more wool on the sheep than will suffice to pay his wages, and, as my honest neighbor, Ben. Rogers, says, "in the course of the day will take off hide enough for a good sized leather apron in the bargain."

There is an inhuman practice of shearers, which every wool grower should discountenance and correct, which, if it was not so common, I would not allude to,—and that is, of cuffing and kicking sheep to make them lay still when shearing;—how foolish, how ridiculous;—those who are acquainted with *my ways* know better than to exercise *thus* their brutal spite.

The next point suggested to my mind, although disconnected with the subject before us, is the rejecting of all "peculiarities"—as honest Ben terms *burs*, *clippings*, *dig balls*, &c. &c.—from the fleece, before rolling it. If I had not already exposed sufficiently before this, the abominable practice of many farmers of enclosing all that sort of thing in the fleece with a view of increasing its weight, and thereby cheating the manufacturer, here would be the proper place to discharge a broadside. For years past I have, with the assistance of a small lad, rolled the fleeces of all the sheep sheared on the farm on which I reside, consisting of ten hundred or more, and therefore, by personal attention, and having the *desire* and *will* to do the *clean thing*, I have succeeded in obtaining five cents per pound more for my wool than I should otherwise have got, provided its condition was ordinary. If a sheep is filthy it is *taken to the door and tagged*, and not done upon the floor;

here is the key which unlocks the door, and we are able to see, and know, *why* so much of trash is found intermingled with the fleece. It is usually done upon the *spot* where the shearer is, and when he has finished, the fleece with all the "beautiful superfluities" attached, is taken up and rolled together;—sometimes they are rejected, that is to say, if the owner has any pretensions to honesty, otherwise the manufacturer must be visited with the consequences of his abominable dishonesty. To prevent clippings from attaching to the fleece, I do not permit my shearers to trim the legs, &c. until the fleece has been removed from the floor,—after this is done, and the sheep duly marked and let go, the longest *trim-locks* are picked up and put by themselves; all else is carefully swept from the floor before another sheep is introduced. In spite, however, of the greatest vigilance, some trash will be rolled with the fleece; but to show your readers how little does escape my observation, on referring to my invoices of 1835 and '36, adding the clips of those years together, the amount is 7340 lbs., from which was deducted 33 lbs. of "strings and dirt," 24 lbs. of which was twine; leaving only 9 lbs. for clippings, &c. All this is duly recorded on the sorter's books of the Middlesex Company. I am thus particular, Mr. Editor, for I dislike preaching without correspondent practice.

A word here in regard to securing fleeces. Mr. Lawrence, in his letter recently published in the Genesee Farmer, recommends the example of his friends, H. D. Grove and Daniel Rogers, which is, to bind the fleece by twisting a band from the tail or flanks. I fear, not until all our flocks have been brought to the exquisite fineness of those gentlemen, will the course he recommends be adopted, for the reason, that wool growers in general do not like to expose the coarsest part of the fleece. For myself, I am indifferent, provided I could secure it as quick and as well that way as with twine;—as it is, I should be under the necessity of taking lessons from his friends.

At the time of shearing, there are many matters requiring particular attention, viz: sawing of horns which are likely to grow into the head or eyes of the animal,—cutting off the hoofs, which, with fine woolled sheep not uncommonly grow to an uncouth length,—marking them; not the ears; this should be done when the lambs are weaned; but with an iron formed to represent the letter O, or a diamond, with a handle attached, and with black paint, marking the ewes upon the left shoulder, the wethers upon the right, and bucks on the rump. This is in much better taste than a huge daub of Spanish brown, or some ill formed letter covering the whole broadside of the sheep.

Those having small flocks, shearing is also a fit time to separate the aged and infirm, the poor, or others which require particular care. For these purposes, I have chosen other seasons, all which will duly appear hereafter. But shearing is the time, above all others the most important, to observe whether your sheep are affected with scab;—if you have the least suspicion that only one is affected, separate it at once, for the disease is contagious, and apply the proper remedy, which is a decoction of tobacco water with a small portion of corrosive sublimate intermixed. I had not had a sheep affected with a scab in eight years, because they are surrounded by the never-failing

preventive, viz: good keeping and protection during winter.

Another important matter is usually attended to at the time of shearing, viz: docking and castration of lambs. For the last two years I have chosen an earlier period; but with those who have small flocks, it is as well to adopt the usual time. If the weather is warm, it will be necessary to use a little lard, warmed to a liquid, with the addition of spirits turpentine, and anoint the parts, otherwise there is a danger of maggots. By choosing an earlier time, when the weather is usually cooler, the use of any thing is superseded, and the loss rare. This season, I am aware of the loss of only one out of nearly 500, and this arose from carelessness of docking.

But allied with the shearing, is tagging of sheep, although performed, or should be, in April, and before they are turned to grass. My space will not allow me to expose the slovenly, nay, scandalous, manner in which this is usually done. It is common for many farmers to cut off only the most filthy locks; all else goes with the fleece. The remarks of your correspondent, alluded to at the beginning of this essay, are apposite, and I will here quote them. "No farmer need suppose that if he trims his fleeces closely, the wool so taken off is lost. If his flock is of good quality, the skirts will make better flannels than can be purchased at the shops; and if not wanted for this use, they can be converted into carpets, &c. and the better price he will obtain for that sold, will in most cases amply compensate for the part taken off and reserved for such uses." Now I will prove the truth of all this. By reference to my books, I find the quantity of *tag wool* taken off from my flock year before last—which then amounted to 1600—was 420 lbs.; it was manufactured into satinets, and here is the result:

From 420 lbs. received 343 yards, which was sold for 97 cents,	\$332,71
Deduct 37½ cents per yard for expense of manufacture,	128,62
Nett,	\$204,09

This, it will be perceived, is equivalent to 48½ cents per lb. for the wool. Last year I did not do so well, although I sold not a yard of satinets below 89 cents. From my flock this year I took off 520 lbs., which is now being manufactured. I make this expose to confirm the truth of your correspondent's statement, as quoted above; I hope it will result as well for others.

Time presses, Mr. Editor, and I must hasten to a close. One word more—when tagging, aside from cutting much from the flanks and tail, be particular to shear all the wool growing about the teats of the ewes, and also, for it is much neglected, the wool immediately around the "water works" of your bucks and wethers; otherwise, the wool being constantly saturated with urine, will cause inflammation, ulceration, and finally death. I have lost sheep from this cause.

It is my purpose, sir, although leisure is a rare thing with farmers at this period of the year, to furnish your readers, when time affords the opportunity, an outline of the general course of management of my flock of sheep.

Lansing, Tompkins Co.

L. A. M.

From the Genesee Farmer.

RUTA BAGA.

The value of this excellent root is rapidly becoming properly appreciated among farmers, and though the feeding out the roots is attended with some trouble, (the only objection we have heard made to them) the advantages of their culture is so decided, that we may expect few farmers will be willing to forego them. That they can be fed out to any animal, or in any way, without some profit, we do not apprehend; and our experience would go to corroborate the many testimonies we have published from various sources of their excellence, and the ease with which, under ordinary favorable circumstances, they can be cultivated. In feeding them to animals, the least favorable results have been obtained when given in a raw state to swine. In this respect, however, they have not greatly differed from raw potatoes; either of which fed in this state to pigs seeming to be of little value. The value of potatoes, as every one knows, is nearly or quite doubled by cooking, and some experiments would seem to indicate that a similar result is effected on the turnip by the same means.

Mr. Mayleet, near Montrose, Pa., who last year raised turnips at the rate of 1333 bushels per acre, and with the addition of some coarse grain provender, fattened his pork upon them. The pork, he says, was excellent.

Mr. Bement, of Albany, well known for his successful efforts to introduce superior animals of different breeds to the farming community, particularly the Berkshire pigs, kept twenty of these hogs, mostly full grown, on six bushels of ruta бага and one bushel of buckwheat bran, a day, for the whole, divided into three meals, two fed raw and one boiled. Fed in this way for three and a half months of last winter, they were found to thrive as well as when fed on four quarts of corn, each, per day; which at the prices of grain at that time, would give a value 28 1-2 cents to the ruta бага.

Mr. Mather, of Scaghticoke, a farmer of system and enterprise, instituted an experiment in feeding cattle with turnips, to test their value in comparison with other kinds of food, and the result, as communicated to the Cultivator, was as follows:

"I fed two yoke of cattle on turnips for two months—November and December; feed, five bushels a day a yoke. Average gain 115 lbs. a yoke per month. The same cattle were fed through the month of January on potatoes and meal, corn and oats, ground together in equal quantities; feed two bushels of potatoes, one bushel of meal. Gain 60 lbs. a yoke. Estimate the value of the ruta бага by the price of corn, oats and potatoes, and the respective gains, and it makes the ruta бага worth but a fraction less than 48 cents per bushel."

For feeding and fattening pigs, we should, at present, prefer cooked potatoes to turnips; but when it is remembered that on an average, three times as many turnips as potatoes can be grown on an acre, the latter, when cooked may be found the most valuable in the end, and experiments in the case of swine are needed to settle this point. As food for cattle or sheep, the turnip is superior to the potatoes; and for making fine beef or mutton, the ruta бага has scarce a rival. We in this country, are yearly becoming greater imitators of the

English, in substituting beef and mutton for pork; a fact we attribute to two causes—the partial failure of the corn crop, without which it is generally considered impossible to make first rate pork, and the increased culture of the ruta бага, which has produced beef and mutton of unexceptionable quality.

From the Southern Agriculturist.

RULES FOR THE GOVERNMENT OF OVERSEERS.

Colleton, May, 1838.

Mr. Editor,—One of the best overseers I ever had, laid down the following rules for his regulation. There are some excellent things in them, and I would advise overseers to write them out, and place them over their mantle pieces for observance.

Yours,

P. C.

RULES.

1.—Before going to bed, I will think over what I have to do next day, and note it upon my slate, in order that it may be recollected on the morrow.

2.—I shall rise early, and never let the negroes catch me in bed of a morning, but see that they are all put regularly to their work.

3.—After rising, I shall not idle about, but go directly at the business of my employer. I shall see that the negroes are at their work—that the horses have been fed, the cattle attended to, &c. If any of the negroes have been reported as sick, I shall without a moment's delay, see what ails them, and if they be really sick, I shall at once see that proper medicines and attendance are given.

4.—Wherever the negroes are working, I shall consider it my duty to be frequently with them, in order that I might see how they get along. I shall not content myself with doing this once a day; but I shall do so repeatedly, observing every time what they are doing, and how they do it. I shall never permit them to do any work wrong, if it take them the whole day to do it right.

5.—Negroes—I shall see that the negroes are regularly fed, and that they keep themselves clean—once a week, at least, I shall go into each of their houses, and see that they have been swept out and cleaned. I shall examine their blankets, &c., and see that they have been well aired—that their clothes have been mended—and that every thing has been attended to, which conduces to their comfort and happiness.

6.—Horses.—I shall consider it my business to see that the horses are properly fed and rubbed—that their stable is well littered. When harnessed and at work, I shall see that their harness fits, and does not gall them, recollecting that these animals, though dumb, can feel as well as myself.

7.—Cattle.—I shall daily see that the cattle have been penned, and have good litter to lie upon; that they have good water to drink, and that their pasture is good. If they should happen not to have good pasture, I shall at once see how I can procure it for them. I shall let the "cattle-minder" know that he is watched and held responsible for these things.

8.—Milk Cows.—I shall contrive to procure these the best pastures—if possible, I shall feed them night and morning, and shall so manage it, as always to have something for them to eat when penned.

9. *Houses, fences, &c.*—I shall endeavor never to let these get out of order. The moment I discover any of them out of repair, I shall have them attended to—never forgetting that a “stich in time saves nine.”

10. *Carts, Wagons, &c.*—I shall observe the same rules about these as about the houses, &c., and shall never put off attending to them until I may want to use them, because then I will not have time to do so.

11. *Time.*—I will always recollect that my time is not my own, but my employer's; and I shall consider any negligence of his business, as so much unjustly taken out of his pocket.

12. *Visits.*—If any one calls to see me, I shall entertain him politely; but I shall never forget to attend to my business on that account. Business first, and amusement afterwards, shall be my motto. If any of my friends are displeased at this rule, the sooner they cease to be my friends, the better.

Bleeding a Remedy for loss of Appetite in Swine.

There has been a number of instances lately, in this vicinity, of loss of appetite and great debility in some sows after having brought a litter of pigs. One or two have died, and others were saved only by assiduous attention in feeding them by hand. A friend mentioned to us the following remedy, which he states is commonly successful. Bleed the animal by cutting across two or three of the ridges or bars in the roof of the mouth. By doing this once or twice, the animal is most likely to recover soon. Should it bleed too much, put some rye meal or soot into the mouth, which will collect about the cut and form a plaster that will prevent any further flow of the blood. No doubt this remedy would be useful in many other disorders of swine, but we seldom hear of bleeding them except by cutting off the ears or tail.—*Maine Farmer.*

White Weed, or Oxeye Daisy.

We are pleased to see that some farmers in this vicinity, whose farms are not already much infected with this troublesome weed, are taking every measure to prevent its spread upon their farms.—On some farms it has become so common that it is almost if not quite impossible to eradicate it; but on those places where it is just beginning to show itself, it can be easily kept down by a little care in preventing its spread. It is a weed which injures more by its negative than by its positive qualities;—that is, it requires much room, and yields but little in return for it. The hay it makes is very well liked by cattle, but it yields small amount to the acre, even when it grows the most luxuriously. It will grow on almost any soil, but it seems to like stiff clays as well as any. Its seeds being furnished with a down, are easily wafted to a distance by the winds, and thus become spread over great extent of country, and frequently spring up on farms to the surprise of the owner, who is confident that he had none of it about him the year before. Prevention is the best system to follow in such places in regard to them. Pull them up and destroy them while there are but few of them. Would it not be well for our Agricultural Societies to offer premiums for the best mode of destroying them? Something of the

kind to turn attention to this particular object, and to induce a trial of experiments upon the subject, would probably lead to valuable results.—*ib.*

Does the Sap of Trees descend into the Ground in Winter?

MR. HOLMES:—In a discussion which took place some two or three years since in the Farmer on this topic, allusion was made to the Sugar Maple, whether the sap which flowed at times so freely in February and March, did not come from the roots, &c. I was making a fence around a sheep pasture and had occasion to cut some sugar maples about the first of May,—the ground then being so frozen in that place that I could not set a stake, though the snow had been off some time. I found the maples bled profusely. The thought occurred to try the roots. I found the sap started from the roots as far as the ground was thawed. I then knocked off the fragments from a root; which exposed it to the sun; in a short time the sap was in motion. I tried the same process the side opposite the sun, but no sap appeared while I stayed—perhaps ten or fifteen minutes. So I conclude that as long as the earth is frozen about the roots, no sap is in motion there; and the sap which flows above, is stowed away there in autumn.—*ib.*

J. H. J.

Peru, May, 1838.

Crops—The Wilmington, Del. Journal, says: “From all we can learn, we believe there is no doubt, that the crops of wheat and rye have pretty generally failed in this peninsula, below New Castle county. This, at least, is the purport of all the authentic information we have received both from our own state, and from the eastern shore of Maryland.* On the other hand, the prospect for corn is excellent. A letter from Kent says—‘The crops of corn generally never appeared better at this season. My corn will average more than eleven feet high in a lot.’”

[*The purport of nearly all the information we have received, is the very converse of the above; for with very few exceptions, in all lands *calculated to grow wheat*, the crops have been excellent—*Rye*, we believe, has generally proved a light crop, and oats but of a medium character.—*Ed. Farmer & Gardener.*

Canada Thistle—We perceive with regret (says the Phila. U. S. Gazette) that the Canada Thistle, that fruit of the curse upon the earth, has found its way into our city and its neighborhood, and is growing with a vigor and multiplicity which shows that it is making itself at home. So far as it regards the city produce, it would be of little consequence, if it were not that the seed is thrown into the mud and dirt of the street, and thence conveyed to the farms enriched by that manure. Now there is no weed that grows of which the farmers have such utter horror, and the rapidity of its increase in the city lots and in the uncultivated spaces in the adjoining districts, shows how much it is to be dreaded. We learn that the subject has arrested the attention of the agricultural society, and that body has memorialised the authorities of the adjoining districts, and one of the committees of the city councils upon the importance of tak-

ing measures to prevent an increase of the evil.

We saw on Monday, a colored man engaged with a scythe in a fine luxuriant growth of this thistle, and he was lopping stock and branch at a round rate; but the harvest was ample, and it is probable that frost will come to his aid before he can have cut down half the growth before him.

Radishes—This root being liable to be eaten by worms, the following method is recommended for raising them: Take equal quantities of buckwheat bran, and fresh horse-dung, and mix them well and plentifully in the ground by digging—Suddenly after this, a great fermentation will be produced, and numbers of toad-stools (kind of mushroom) will start up in forty-eight hours. Dig the ground over again and sow the seed, and the radishes will grow with great rapidity and be free from the attacks of insects. They will grow uncommonly large. Buckwheat bran is an excellent manure itself.—*Farmer's Assistant.*

Useful Invention.—A churn invented by Joshua G. Pike, was exhibited recently at the United States Hotel, by Mr. Pettibone the owner of the patent right for this State. Mr. Pettibone produced butter from the cream in 5 minutes, although labouring under many disadvantages. The superiority of this churn, over other inventions of a similar kind—are that it will produce butter in a shorter time, collect the butter into a lump after it is formed, work the buttermilk out of the butter, as well as it can be done by hand; can with the utmost ease, and in a short time be taken apart, so as to enable the dairy maid, to wash every portion of it, and is extremely simple in its construction—price from \$7. to \$10.—*Fred. Cit.*

The Corn crop is very much injured by the long continued drought, and excessive heat. Some fields we have seen we consider irretrievably ruined, while those whose appearance is most promising, cannot we think under any circumstances, yield more than a half crop; and unless we have a rain speedily they too will be entirely destroyed. The pastures and the gardens are burnt up.—We have been tantalized for the last week, by the promise of rain from clouds surcharged with it, passing over, without contributing one drop, to the relief of the parched earth and perishing vegetation.—*ib.*

The Weather and the Crops.—In the early part of last week the weather was exceedingly hot, Tuesday the 10th going ahead in that line. The heat afterwards decreased, and the air became cooler, though without rain here. It has been gradually growing warmer since.

Our farmers during the above period and at the present time are busily engaged in harvesting. We have made inquiry, as far as opportunity permitted, respecting the state of the crops, and learn that in many instances in this neighborhood the rye has been most seriously injured by rust. Other fields, however, are good. The wheat, we learn, is abundant and of excellent quality. The extreme heat of the weather and absence of rain have destroyed the pasture—injured the potatoe crops, and are beginning to have a hurtful effect on the corn, which lately looked most promising. Rain now would be of great advantage.—*York (Pa.) Republican.*

WOOL-GROWING INTEREST.

More than forty million pounds of wool are produced every year in the fifteen wool growing states. It appears from a paper presented to the Washington County Whig Convention, that from 1827 to 1836, a period in which manufactures were more or less injuriously affected by the anti-tariff policy of the administration, the price was never less than 35 cents, and in 1836 it was 58 cts. per lb. From 1836 to May 1837, there was no extraordinary cause from which a fall in prices could be expected. In 1837, in consequence of the deranged state of the currency, commerce first felt the shock, manufactures next, and at last the farmers were made to feel its force. Although commerce and manufactures were paralyzed, merchants and manufacturers were compelled to eat; and the ordinary markets for beef, pork, butter and cheese have remained open, and prices have but slightly varied. But with wool, the staple of the state, it has been different. In 1837 the average price was but 34½ cts. per lb. showing a fall of 23½ cts. from 1836.

From the continued unsettled state of the business and monetary affairs of the country, we find that wool is the present season down to 28½ cts. nearly ten cents less than it has been for at least twelve years. The following tabular statement exhibits at a glance the loss sustained by wool-growers in consequence of the interruptions of trade and commerce:

Years.	Amount of Wool.	Price.	Total.
1836	40,000,000	58 cts.	\$23,200,000
1837	40,000,000	34½	13,800,000
1838	40,000,000	28½	11,400,000
Deducting the total of 1837 from that of 1836, and the loss is			
			\$9,400,000
The total of 1838 from that of 1836, and the loss is			
			11,800,000

Showing an aggregate loss of \$21,200,000 sustained by the wool growers alone in two years. Estimates based on the last grand list, and known prices, show that the wool growers of Vermont have lost since 1836, \$1,440,429. Can a state, which does not raise its own bread stuffs, afford such losses?—*Vergennes Vermonter*.

A REMEDY FOR THE BLACK WORM.

A correspondent who subscribes himself "A Visitor from Ohio" has furnished us with the following:—

Having observed by your public prints, that many of your beautiful shade trees in this City are already suffering much from the ravages of the large black worm, I hasten, from the impulse of a most agreeable duty towards that lovely city whose kind hospitalities I am sharing, to communicate a remedy which we, in Ohio, have repeatedly tried most successfully, in the destruction of the caterpillar on our fruit trees, which, I doubt not, would answer equally well for the like here existing. I mean the flour of Sulphur,—and it is to be introduced into the body of any tree infected with these worms, by first boring with an augur or gimlet, according to the size of the tree, then inserting the sulphur, with a quill or other tube, and usually about one-third of the way into the tree, then tightly plugging up the orifice. In a few hours we have seen these little pirates running off in every direction; or, as is most generally the

case, falling dead by handfulls from the trees. The sap, circulating through the tree, goes, tinctured with this, through every part of it, and the direful effects may also be witnessed by a microscope among the tribes of disconcerted animalculæ upon the surface of the leaves.

I think the pitch burning in the pots, and sending its smoke up, as recommended, may answer in a very still time, but we deem the other mode far preferable. If the diameter of the tree, be from five to ten, or even twelve inches, a half inch augur may be used; if less than five inches, we usually take a large gimlet.

P. S.—I tried the foregoing, one season upon a number of fine English plum trees for a different purpose, having for some years before lost the fruit; this year we enjoyed some of the fruit, but I think I bored them too late. The plum was ripening:—the present would be a suitable time. Whether this will answer for the above purpose I do not decidedly affirm, but believe it well worth the trial.

Effectual method for destroying Caterpillars.

An intelligent gardener has communicated to us a plan for destroying caterpillars, which we are sure will be very acceptable to many of our readers at the present moment, when this destructive animal is committing such ravages among the currant and gooseberry bushes in all quarters. His plan is to smoke them. This is effected by placing on some live coal or peat in a flower pot, or other convenient vessel, a small portion of tobacco, and placing it under the bush to be smoked. An old table cloth or carpet is then thrown over the bush, and bellows used for blowing the peat. In this way, the tobacco smoke, which moves upwards, is confined to the bush, and the caterpillars, in the course of four or five minutes, fall to the ground, apparently lifeless. As they soon recover, however, it is necessary to collect them together with a hoe, and to destroy them.—Our informant states, that he has frequently tried this plan, and always with success.—He recommends the plan being adopted in the earlier stages of the caterpillar, as thereby not only is the injury they would otherwise commit prevented, but the effect of the tobacco smoke is found to act more speedily.—*Aur. Observer*.

Mange in Hogs—A correspondent of the Southern Planter says:—"During my travel through the State, especially in towns and villages, I see a vast number of swine dying with what is called the *mange*, while many others are on the eve of expiring. This disease is very easily cured, if persons would only take the trouble of pulverizing sulphur, and giving each hog affected, one table spoonful in a little corn meal dough, twice a week for two weeks, they will shed the scurf and become perfectly clean. The sulphur at the same time destroys lice and fleas on the swine."

Sheep consume a greater number of plants than any other domestic animal.—Linnæus, in examining into this subject, found by offering fresh plants to such animals, in the ordinary mode of feeding, that horses ate 262 species, and refused 212; cattle ate 276 species, and refused 218; while sheep took 387 species, and only refused 141. We find, too, great difficulty in preventing sheep from

springing over the dykes and hedges that we place as boundaries to their rambling habits, yet how seldom do we see the true cause of their determination to set them at defiance. We may partly account for it by considering their analogy to the goat, and their propensity to scale rugged eminences; but I think these movements rather indicate an anxiety to change a pasture already exhausted of variety, for fresh fields, and herbage abounding in that miscellaneous provision which nature apparently reckons essential for them.—*Farmer's (English) Magazine*.

Whenever Silk becomes, as it will become, one of the staple productions of our country, it will be more generally adopted in dress. Silk, being a non-conductor of electricity, is a superior material for clothing. One of the primary causes of the languor which is felt in damp weather, is said to be the damp atmosphere robbing us of our electricity—which a medical writer calls the buoyant cordial of the body. Those therefore who are apt to be spiritless in damp weather are recommended to wear silk waistcoats, drawers and stockings. Silk should be used in every possible manner by the feeble—in the lining of sleeves, cloaks, coats, cover-lits, under garments, &c.—*Lan. Her*.

BRUSSA MULBERRY.

Mr. Consul Rhind, who resided in Turkey a long time, and interested himself in the subject of mulberry and silk, speaks very highly of the Brussa mulberry tree, of its capacity to endure the rigors of severe winters—that it flourished best in high and even poor land—that silk made from it is of superior quality, and highly estimated in all foreign markets, especially for sewing silk—that when the crop season commences, the leaves are brought into the city by the cultivators in baskets and sold in the market in quantities to suit purchasers, in the same manner as fruits and vegetables.

He entertains the utmost confidence in the ultimate success of the silk cause in America. He says "that silk can be produced with infinitely less trouble than is generally supposed, I am fully persuaded. And I have in the course of my travels visited most of the silk growing countries, and gave considerable attention to the subject."

Again he says—

"The culture of silk is peculiarly deserving the encouragement of patriotic and benevolent men, inasmuch as it will afford (in its different manifestations) a living to the most helpless of our race; aged and decrepit persons and children can all be employed in some part of the process, and to a portion of the female sex who may have been reared in luxury and indulgence, but by change of fortune have become reduced, yet are willing to labour rather than depend on the cold hand of charity or the benevolence of friends, this culture will afford a certain and independent living, without exposing them to the scoffs and scorns of a selfish world."

In reply to a letter of Mr. Rhind to Judge Spencer, accompanied with the Brussa mulberry tree, Judge Spencer says—"The Brussa leaf is considerably larger and thicker than the white mulberry leaf, and nearly if not equal to the *Morus Multicaulis*."—*Northampton Courrier*.

BALTIMORE PRODUCE MARKET.

BALTIMORE PROVISION MARKET.

These Prices are carefully corrected every Monday

	PER	FROM	TO
BEANS, white field,	bushel.	1 25	
CATTLE, on the hoof,	100lbs	7 50	8 75
CORN, yellow	bushel	65	
White			
COTTON, Virginia,	pound	9	11
North Carolina,	"	10	11
Upland,	"	9 1/2	11
Louisiana — Alabama	"	11 1/2	12
FEATHERS,	pound.	45	50
FLAXSEED,	bushel.	1 12	
FLOUR & MEAL—Best wh. wh't fam.	barrel.	10 00	
Do. do. baker's	"		
SuperHow. st. from stores	"	7 00	7 25
" wagon price,	"	6 75	7 00
City Mills, super	"	7 25	7 50
" extra	"	7 75	
Susquehanna,	"	7 00	
Rye,	"	4 25	4 37
Kiln-dried Meal, in hhds.	hhd.		
do. in bbls.	bbl.		
GRASS SEEDS, wholes. red Clover,	bushel.		
Kentucky blue	"	2 50	3 00
Timothy (herds of the north)	"	2 25	2 50
Orchard,	"	2 00	2 50
Tall meadow Oat,	"		3 00
Herds, or red top,	"	90	1 00
HAY, in bulk,	ton.	10 00	15 00
HEMP, country, dew rotted,	pound.	6	7
" water rotted,	"	7	
HOGS, on the hoof,	100lb.	7 00	7 25
Slaughtered,			
HOPS—first sort,	pound.	9	
second,	"	7	
refuse,	"	5	
LIME,	bushel.	33	34
MUSTARD SEED, Domestic, —; blk.	"	3 50	4 00
OATS,	"	27	
PEAS, red eye,	bushel.		1 12
Black eye,	"	1 00	1 12
Lady,	"		
PLASTER PARIS, in the stone, cargo,	ton.	3 50	3 75
Ground,	barrel.	1 50	
PALMA CHRISTA BEAN,	bushel.		
RAGS,	pound.	3	4
RYE,	bushel.	60	63
Susquehanna,	"		none
TOBACCO, crop, common,	100lbs	4 00	4 50
" brown and red,	"	4 00	6 00
" fine red,	"	5 00	8 00
" wrappery, suitable	"		
for segars,	"	10 00	20 00
" yellow and red,	"	8 00	10 00
" good yellow,	"	8 00	12 00
" fine yellow,	"	12 00	16 00
Seconds, as in quality,	"		
" ground leaf,	"		
Virginia,	"	4 50	6 00
Rappahannock,	"		
Kentucky,	"	5 00	8 00
WHEAT, white,	bushel.	1 40	1 55
Red, best	"	1 35	1 40
Maryland	"	1 25	1 25
WHISKEY, 1st pf. in bbls. }	gallon.	31 1/2	32 1/2
" in hhds. }	"	30 1/2	31
" wagon price,	bbls		29
WAGON FREIGHTS, to Pittsburgh,	100lbs	2 25	
To Wheeling,	"	2 50	
WOOL, Prime & Saxon Fleeces,	pound.	40 to 50	20 22
Full Merino,	"	35	40 18 20
Three fourths Merino,	"	30	35 18 20
One half do.	"	25	30 18 20
Common & one fourth Meri.	"	25	30 18 20
Pulled,	"	28	30 18 20

	PER.	FROM.	TO.
APPLES,	barrel.		
BACON, hams, new, Balt. cured	pound.	14	15
Shoulders,	"	10 1/2	11 1/2
Middlings,	"	10 1/2	11 1/2
Assorted, country,	"	10	10 1/2
BUTTER, printed, in lbs. & half lbs.	"	16	25
Roll,	"		
CIDER,	barrel.		
CALVES, three to six weeks old	each.	5 00	6 00
Cows, new milch,	"	25 00	40 00
Dry,	"	12 00	15 00
CORN MEAL, for family use,	100lbs.	1 62	
CHOP RYE,	"	1 50	1 60
EGGS,	dozen.	12 1/2	
FISH, Shad, No. 1, Susquehanna,	barrel.	9 75	10 00
No. 2,	"	9 50	
Herrings, salted, No. 1,	"	4 25	4 75
Mackarel, No. 1, ————No. 2	"	10 00	12 00
No. 3,	"		
Cod, salted,	cwt.	3 25	3 37
LARD,	pound.	10 1/2	11

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

	U. S. Bank,	VIRGINIA.
Branch at Baltimore,	do	Farmers Bank of Virgi. 1 1/2
Other Branches,	do	Bank of Virginia,
MARYLAND.		Branch at Fredericksburg, do
Banks in Baltimore,	par	Petersburg,
Hagerstown,	3a	Norfolk,
Frederick,	do	Winchester,
Westminster,	do	Lynchburg,
Farmers' Bank of Mary'd, do	do	Danville,
Do. payable at Easton,	do	Bank of Valley, Winch. par
Salisbury, 1 per ct. dis.	do	Branch at Romney, ... par
Cumberland,	par	Do. Charlestown, par
Millington,	do	Do. Leesburg, ... 1 1/2
DISTRICT.		Wheeling Banks, 3 1/2a
Washington, } Banks, 1p.c.		Ohio Banks, generally 5a6
Georgetown, }		New Jersey Banks gen. 3
Alexandria, }		New York City, par
PENNSYLVANIA.		New York State, do
Philadelphia,	par	Massachusetts, 1 1/2a2
Chambersburg,	1/2	Connecticut, 1 1/2a2
Gettysburg,	do	New Hampshire, 1 1/2a2
Pittsburg,	2 1/2	Maine, 1 1/2a2
York,	do	Rhode Island, 1 1/2a2
Other Pennsylvania Bks. 2		North Carolina, 5
Delaware [under \$5] 4		South Carolina, 6a7
Do. [over 5]	1 1/2	Georgia, 8a10
Michigan Banks,	10	New Orleans, 8a10
Canadian do.	10	

FOR SALE,

Two superior DEVON bulls, 4 years old this spring, of the purest blood in the country, fine form and remarkably large. Any gentleman wishing to procure one will find it to his advantage to embrace the present opportunity, as they will be sold at the low price of \$100 each, deliverable in Baltimore.

Applications in writing, post paid, to be made to the subscriber.

EDWD. P. ROBERTS, Baltimore, Md.

may 29

3t

FARMERS' REPOSITORY

OF AGRICULTURAL IMPLEMENTS AND EAST MAN'S CYLINDRICAL STRAW CUTTERS IMPROVED.

THE Subscriber informs the public that he has secured by letters patent his late and very important improvements on his Cylindrical Straw Cutter, by which improvements they are made more durable and easier kept in order. All the machinery being secured to an iron frame the shrinkage, wear and decay of wood is avoided. The feeding part of his improved machine is upon an entire different principle from the former machine; far more durable, requiring neither skill or care to keep it in order. These machines are so constructed as to make the freight on them less than half what it cost to ship the former or wood machines, an important desideratum to purchasers living at a distance; and I now offer it to the public upon

the credit of my establishment as the most perfect machine in existence for the same purpose. They are also adapted to cutting rags for paper making, and for cutting tobacco as manufactured by Tobacconists, &c.

I also keep these machines on hand made as heretofore with my new feeding machinery attached to them; and also a general assortment of Agricultural Implements, as, usual. Elliott's Horizontal Wheat Fans, and Fox & Board's Threshing Machines are both superior articles.

My stock of Ploughs on hand are not equalled in this city either for quality, quantity, or variety. I have a large assortment of Plough Castings at retail or by the ton, and having an Iron Foundry attached to my establishment can furnish any kind of Plough or Machine Castings on reasonable terms and at a short notice.

All repairs done with punctuality and neatness. On hand, a few Patent Lime Spreaders, Horse Powers, &c. &c. Also just received, a fresh supply of Landreth's superior Garden Seeds. In store, superior Timothy and Orchard Grass Seed and Seed Oats. All implements in the agricultural line will be furnished by the subscriber, as good and on as reasonable terms as can be had in this city, with a liberal deduction to wholesale purchasers. Likewise will receive orders for Fruit Trees from Mr. S. Reeves' Nursery, New Jersey.

JONATHAN S. EASTMAN,

Pratt street, Baltimore,

feb 20

Between Charles & Hanover sts

TO THE PUBLIC.

Try the New Agricultural Establishment in Grant-street, next door to Dinsmore and Kyle.

Every article warranted to be first rate. The subscribers, grateful for past favors, take this early opportunity of returning their thanks to their customers and the public in general, and beg leave to inform them that they are now provided with a very extensive stock of newly manufactured AGRICULTURAL IMPLEMENTS, suitable to meet the call of Farmers, Gardeners, Merchants, Captains of vessels, and others, viz: 1000 Ploughs, assorted sizes, from \$4 to \$15 each, comprising of the old common Bar Shear, Winand's Self Sharpening; Woods & Freeborn's patent, all sizes, "Davis," "Sinclair & Moore's" improved Hill Side Ploughs, highly esteemed for turning the furrow down hill, with wrought or cast shears; Wheat Fans, of various sizes and patterns, from \$15 to \$50 each, warranted to separate the garlic from the wheat; Corn Shellers, from \$12 to \$20; Cutting Boxes, from \$7 to \$50 each; Corn and Tobacco Cultivators, large and small; Expanding do., Wheat Cradles, warranted to have fingers of the natural growth, and Grass Scythes, &c. &c.; Castings, of all descriptions and patterns, by the lb. or ton, to suit customers, allowing a liberal discount to merchants buying to sell again—all of which will be furnished on the most pleasing terms and every article warranted to be of the best quality, in proportion to the cost price. All orders by mail or otherwise shall be duly attended to with the greatest despatch.

We would particularly call the attention of Country Merchants and others, wishing to purchase agricultural implements to sell again, to the fact, that we will furnish them with articles on better terms than they can be supplied at any other establishment in the city. Our assortment is complete and as varied as that of the most extensive concern in Baltimore.

We have also connected in its operations with the above branch of business a complete assortment of FIELD AND GARDEN SEEDS, kept by Thomas Denny—Also Garden and Farm Tools, of various sorts and of the choicest collection, which will enable our customers to have filled entire all orders in the Agricultural and Seed Departments. mh 26 JOHN T. DURDING & Co.

CONTENTS OF THIS NUMBER.

Notices of communications—the drought—hint relative to timothy grounds—culture of turnips—silk culture in New Jersey—preservation of peach trees—Mr. J. Smith's communication on the crops in Missouri—notice on a trip from Baltimore to Frederick—things that are wrong—drought in New York—on shearing of sheep—culture of ruta baga—rules for the government of overseers—bleeding a remedy for loss of appetite in swine—white weed or oxeye daisy—sap of trees—crops in Delaware and E. S. of Md—Canada thistle—culture of radishes—newly invented churn—drought in Frederick, Md. and York, Pa.—loss to wool-growers—remedy for black-worm—method to destroy caterpillars—mange in horses—sheep pasturage—silk culture—Russia mulberry—prices current.

MORUS MULTICAULIS TREES.

The subscriber has from 25,000, to 30,000 Morus Multicaulis trees now growing at his residence, with roots of 1, 2, and 3 years old, which will be ready for sale this fall, and which he will sell on moderate terms.

EDWARD F. ROBERTS.

THE FARMER & GARDENER

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, E. P. ROBERTS AND SAMUEL SANDS—EDITED BY E. P. ROBERTS.

No. 15.

BALTIMORE, MD. AUGUST 8, 1838.

Vol. V.

THE SILK CULTURE IN NEW JERSEY.

We publish in another column to-day, an article under the above head from our correspondent "Powhatan," which will be found to contain a well merited eulogium upon the people of the ancient village of Burlington, N. Jersey, which eulogium we know is as well merited as it is sincerely meant by our correspondent. From his character we feel justified in saying it comes warm from the heart, and we are the more gratified at the favorable account which he gives of the state of the silk culture in that quarter, as we know him to be both a competent and disinterested judge in matters of the kind, and his standing is at once the guarantee and bond for the truth of what he advances.

SUPPLY OF BREAD-STUFFS—PRICE OF WHEAT.

We publish in another column to-day, two articles from the United States' Gazette, on the subject of the grain raised in England and America, for which we bespeak the attention of our agricultural readers. And while we do so, we feel ourselves called upon to make a few additional remarks. We have paid particular attention to the current of information relative to the crops of the present year, and from the best intelligence we have received, we have arrived at the following conclusions:—the *Wheat* crop is the largest which has been raised in this country for many years: the *Rye* crop, though good in some quarters, upon an average, is a very light one; the *Oats* crop a comparatively small one. So much for the crops that have been got in; and now let us turn our attention to those which are growing. Four weeks ago, the prospects for abundant crops of corn gladdened the eye in every direction of our country, but the recent drought has destroyed the early hopes and blighted the fond anticipations of the corn-grower. In every quarter where we have information, the same disastrous consequences prevail, and taking up the numerous accounts we have seen, with a view of arriving at a just conclusion as to the prospective yield of the corn crop, we are honestly of opinion, that unless it should please Providence to bless the country with seasonable rain, that not more than *half an average* crop will be raised; and that, should the remain-

der of the season prove ever so propitious, that not more than *three-fourths* of an average crop can be now grown. Of all others, the late prevailing drought came at the very worst time—just when the early corn began to silk and the late to put forth its shoots—periods the most critical to fructification—a period when the stalks require much and a constant supply of moisture to enable them to give out the nourishment requisite to the perfect formation of the ears of corn. The rain in this quarter, of last Tuesday night, has done considerable good; but a very large portion of corn in this state was, at that time, in that state of forwardness which placed it beyond the reach of the beneficial effects of rain, to any considerable extent, so far as the production and perfection of the grain are concerned. The late corn, however, is susceptible of much greater improvement, and has derived striking benefit from the recent rain, and should the remainder of the season prove favourable—should good gentle soaking rains prevail at proper intervals—it will make a handsome yield. It is from this description of corn, and the prevalence of such weather, that we derive our hopes of even three-fourths of an *average* crop. It is known that the effects of the drought have been equally disastrous to the *Potato* crop, and we think that we may safely affirm, that not more than half the usual quantity in fruitful years, can under any circumstances be raised.

We have thus briefly stated what we believe to be the true state of things, present and prospective, and we would ask the reader, whether under such circumstances he does not believe that there will be such a demand for the breadstuffs as will, of necessity, *keep up the price of wheat*? How is it possible that wheat can materially come down in price, notwithstanding the heavy crop, when the products of Rye, Oats, Corn and Potatoes have, or must prove to have been greatly under a fair average yield? We think common sense answers the question; and from a high obligation of duty to the agricultural community, we ask them to ponder well in their minds, all those considerations which have a bearing upon the subject, before they agree to sell their wheat at less than a fair price—at such a price as will afford a liberal profit. Wheat cannot by any fair operation of

trade come down in value; for although the crops as we have before stated, have proved very large, the *supply* is not greater than the *demand*, and the latter as every one must know, will be *increased* in a just proportion as the supply of rye, corn, oats and potatoes may be deficient. Thus it must be obvious, that, under present existing circumstances, and those in prospective, wheat ought to and must command a *good price*, and we again advise farmers not to let their crops slip out of their hands without they obtain it.

Since writing the foregoing, we have received a letter from an esteemed correspondent in Fauquier county, Va. from which we make the following extract, which will go to show that our remarks about oats and corn are correct in that quarter at least:

Near Rectortown, Fauquier Co. Va. }
July 31, 1838. }

"Our crop of fall wheat is unusually good both in quantity and quality; and a few weeks since our prospect for oats and corn was quite flattering; but owing to the drought, (not having had rain to do much good) for the last two months, the oat crop is *light*, and the corn crop, under the most favorable circumstances can't be more than half a crop."

Spring Wheat—Farmers who may have cultivated the Italian Spring Wheat, the present season, south of New York, will render an acceptable service to the agricultural community in the middle, southern, and western states, by causing faithful reports of the success which may have attended their respective experiments, to be published in some newspaper convenient to them. If those experiments have proved the adaptation of this variety of wheat to the region of country named, regard to profitable yield being had, it is important that the fact be known, in order that its culture may be extended and its benefits generally enjoyed; and if the contrary be the case, it is proper that its true character be laid before the country, so that no more money may be expended in unavailing experiments in its cultivation.

The Corn Crop—As great anxiety is entertained in all directions, about the growing crop of corn, the press throughout the country would be conferring a favour by procuring and publishing the information they may obtain relative to the

condition and prospects of this *crop* in their several neighborhoods. Say what we may, it is the most important one raised by a large majority of farmers, and the sooner what is to be expected from it is known the better.

Buckwheat—We again call upon farmers to put in extra quantities of this grain, as in the present prospects of failure in the potato and corn crops, its product may come in very well to piece out the supply of eatables. While we thus recommend putting in an extra quantity of seed, let us also advise them to take care of and use the straw; for if it be salted when stacked away, it will make an excellent food for cattle, and will serve to keep the cow-fold in comfort in the long cheerless days of winter.

Turnips—Let every farmer sow as many turnips as he can find manure to put in well, as, in the present aspect of affairs, true economy would dictate that every thing calculated for the sustenance of man or beast which can, should be raised.

Recipe for taking hives without destroying the Bees.—Having always thought that there was great inhumanity in the old plan of *destroying* the bees, in order to take the honey, we determined to try the more humane plan practised by the French of robbing them of their sweets without depriving them of life, and we have put the plan twice into operation the present season with entire success. And as, besides the humanity of the process, it has economy to recommend it, we deem it our duty to lay the method before our readers, in the hope that we may be instrumental in saving many hives of those industrious workmen, and of securing their labors to their owners for numbers of years. The method, which is easy, is as follows:

In the dusk of the evening, when the bees are quietly lodged, place a tub near the hive, then turn the hive over with its bottom upwards into the tub, cover the hive with a clean one, which must be previously prepared by washing its inside, with salt and water, and rubbing it with hickory leaves, thyme, or some other aromatic leaves or herbs—Having carefully adjusted the mouth of each hive to the other, so that no aperture remains between them, take a small stick and gently beat round the sides of the full hive for about 15 minutes, in which time the bees will leave their cells, in the lower hive, ascend and adhere to the upper one. Then gently lift the new hive with all its little tenants, and place it on the stand from which the other hive was taken.

This should be done about midsummer, so as to allow the bees time to provide a new stock of honey for winter's use. If care be observed no danger need be apprehended.

To the editor of the Farmer & Gardener.

THE SILK CULTURE IN NEW JERSEY.

I have been spending a few days in the ancient city of Burlington; and as far as my observations and enquiries enable me to form an opinion, I should say that this was the head quarters of the silk culture in the United States. I have visited several places, whose fame in connection with the advancement of this branch of industry, has been spread far and wide—and I have often been obliged to make diligent enquiries, before I could ascertain *on the spot*, that any thing was doing at said places. But Burlington does not hide her light under a bushel: she places it on an eminence so that all may see, and peradventure imitate her good works. You cannot pass along the pavements, without hearing questions asked about silk worms or mulberries: you can scarcely go into a house but you find the inmates engaged in feeding worms. All classes and conditions, from the dignified functionary of the government to the humble occupant of a village lot—rich and poor—publicans and sinners—have caught the contagion: and recently even a periodical—and a most respectable one too—has been established to promote the culture, and disseminate all useful information on the subject. And if you knew the character of the population here, you would say that the good work must succeed. You would be far from thinking it was the ebullition of the moment—a feverish paroxysm—a day dream; which would subside on the slightest abstraction of the stimulus which now supports and sustain it. Such, I take it, is not the character of this people. On the contrary, they are grave, sedate, industrious—not given to violent and momentary excitement—not liable to be entrapped, and inveigled by designing men, into speculative pursuits;—but a people thoughtful and reflecting, forming their own judgments upon evidence, and when once formed, pursuing their object with an eye that does not slumber, and a wing that never tires. In this city, a large proportion of the population consists of the descendants of the illustrious Penn—remarkable you know, for their industry, perseverance and neatness—and by the force of contact and example, these characteristics have been visibly impressed on all the surrounding population.

Gentle reader! who takest an interest in the progress of this interesting pursuit, you might spend a few days here with both profit and pleasure. You will have all your enquiries answered without hesitation. You will find nothing enveloped in mystery. You will see every one willing and anxious to impart all he knows—and finally, I think you will be convinced that the silk culture is no humbug. POWHATAN.

Burlington, 3d July.

TO FARMERS.

STRAYS—THE LAW—MORALS.

There is, perhaps, no duty between man and man so loosely fulfilled as that required by the law relative to stray stock, nor is there any omis-

sion of duty which visits more inconvenience or uneasiness of mind upon farmers generally. The law requires that if any stray cattle or horses come into your enclosures, that within *five days* thereafter, you shall take the same before a justice of the peace, and cause him to make out a certificate descriptive of such animal, or animals, which certificate, it is your duty to have recorded, within the same time, in the office of the clerk of the County, in which you may reside; and you are further bound to post up at the courthouse and other public places, also within the same time, a notice of such stray or strays, and likewise to publish the same in the most convenient newspaper. The penalty provided by law for non-compliance with these requisitions, is a *fine of ten pounds*. By complying with these requirements, the person taking up such strays is entitled to whatever reward may be offered, and to all reasonable charges for keeping them. An omission, however, to fulfil the obligations of the law, works a forfeiture both of reward and charges of keeping, and the party incurs the fine before named. But the law out of the question, *moral* duty between man and man, should dictate that, whenever a stray comes on your premises, you should take the most prompt measures to advise the owner thereof, in order that he may reclaim him at the earliest possible period. If you doubt this, ask yourself this simple question—"if I were to have my cattle or horses stray away, would I not wish the person on whose premises they stray, to act thus towards me?" I say ask yourself this question, and your answer will force you to act towards your neighbor, as you would he should act towards you. Consult your *conscience* and no one will have cause to complain of you; for *there* you will find a silent monitor, which will always point out the right course for you to pursue.

If your neighbour's cow comes to your house with a *fresh bag*, don't content yourself with *milking* her while the pastures are good and she fills your pail, and delay advertising her until fall; for whatever you may think of it, such conduct is a moral as well as legal fraud.

If your neighbor's heifer come to your house, do not omit to advertise her, nor fatten her up for your meat tub; for be assured, *meat* thus secured for your stomach, will be the forfeit of your character as an honest man, if it does not work your eternal condemnation before that God, who knows all things, and deals out justice without respect to persons.

The honest man will not apply these remarks to himself; but he whom the cap may fit, may wear it with the best grace he may.

A FARMER OF MARYLAND.

To the Editor of the Farmer and Gardener—

Sir—You will confer a great favor on many sufferers by publishing the above communication, as the reading of it may remind some, whose consciences are made of Gum Elastic, of the *penalty of the law*, in cases similar to those alluded to, and thus be the means of making them fulfil a duty through fear, the performance of which should require no stronger stimulant than that arising from the desire of dealing justly towards their fellow-men.

Remarks by the Editor of the Farmer and Gardener.

We comply with the request of our correspondent with cheerfulness, as we are certain that the law regulating strays is not understood by many, and we feel equally certain that great inconvenience, and often loss and vexation, are experienced by owners of stray stock; but we cannot agree with our correspondent in the supposition that any farmer, whether rich or poor, would, for the unworthy purpose of appropriating the milk of another's cow to his own use, delay the necessary publications as pointed out by the law; nor can we entertain the idea, that any would slaughter a stray without previously advertising, as such conduct is too abhorrent to our notions of right to permit the suspicion of the possibility of its perpetration to have a place in our minds.

While we make this disclaimer, we think the papers throughout the state would do good service by copying the above communication.

THE CROPS AND THE DROUGHT.

The wheat harvest has been generally an uncommonly fine one—and so have the oats—and the fruits promise to be very fine and abundant. But vegetation is at least ten days later than it has been for several years.

The state of the Corn crop begins to excite no little uneasiness. Four weeks ago, it never promised to turn out better;—but the unprecedentedly long spell of warm weather, (with the thermometer up to 95, and sometimes 98, at the hottest period of the day)—and the distressing drought with which it has been accompanied, have injured the appearance of the corn. The fodder looks wilted—many of the lower leaves have dried up—and unless the windows of Heaven should open at an early day, and pour down its refreshing rains, we should apprehend that a considerable part of the corn would be cut off. The injury is not confined to this section of the country alone. We learn that the corn as well as the tobacco is suffering in Halifax and the neighboring counties of Virginia.—*Rich. Eng.*

The Weather, &c.—We have just returned from an excursion through Jefferson county, Va., and the adjoining county of Frederick, Md. passing over the length and breadth of the latter—Throughout the extent of our ride the wheat harvest, we were informed, was abundant. The rye has not averaged over half a crop, and oats generally light. Throughout Frederick co. Md., the drought has been excessive, and the crop of corn on account of it, entirely cut off. But few fields, by the best season hereafter, could be so far reclaimed as to make one fourth of a crop, and the most of it is beyond recovery at all—the potatoe crop has shared the same fate.

We had shown to us a field of the Dutton corn in Jefferson, which three weeks since, had already perished for want of rain, proving that it will not stand a drought, in any way equal to that of the white or yellow corn. Throughout the extent of our ride the drought and heat have been exces-

sive and altogether unusual so early in the season. We examined, in our travel, several parcels of spring wheat, both in Virginia and Maryland, from the best seed and of fine promise in the growth, greatly shrivelled up and injured, as was supposed, from the parched state of the ground and extraordinary heat, for several weeks before harvesting it. The yield, however, with this defect, was considered good.—*Winchester Virginian.*

Crops in Washington County—The Hagerstown Torch Light of Friday, says—"Friday, Saturday and Sunday last were the three hottest days we have had this season, and probably for many years back, the mercury ranging in the shade, according to position, from 94 to 102 degrees. On Sunday evening we had a refreshing rain, the first of any consequence, for about five weeks, and on Tuesday afternoon and night, we were favored with another rain, which has considerably revived vegetation generally. In the strong grounds we may probably yet have something like half a crop of corn, and in some instances a tolerable yield of potatoes—in the thin and light or slate grounds, both corn and potatoes are beyond recovery, the stocks being literally dried up—and in most sections of the country, the pasture so far exhausted as to require the feeding of stock as freely as is customary late in the fall after the hard frosts have set in."

It is feared the corn crop will not be so good, unless rain should come to its aid in a few days—In this section of country corn is now suffering very much from the long continued dry, hot, weather; and we notice the same is said in other parts.—*Zanesville (O.) Gaz.*

In Kentucky the crop is said to be very abundant, and it is thought wheat will be down to 50 cents per bushel.

The oats and grass crop will be more abundant than usual.—*ib.*

The harvest.—Our exchange papers from all quarters concur in saying that the harvest which has just been gathered is one of the best that our country has been blessed with for several years. After two weeks arduous toil in the hottest weather we have had for a number of years, the rich and waving mantles that a few days ago covered the fields of our farmers have been taken off by the sinewy arm of the reaper, but not without costing him much 'sweat of the brow' and many palpitations of the heart. The prospects every where are of the most cheering kind. In Virginia, where the failures of crops have been truly discouraging for several seasons in succession, the scene is described as quite *shock*-ing, and the most sanguine hopes of the farmer will be realized in his wheat crop. A cotemporary says, "seldom have we seen before, so many sheafy monuments to the Author of all our 'good and perfect gifts.'" Unlike several previous years, the "shocks" are not now like angels visits, few and far between, but stand in thick and profuse clusters,—blessings scattered all around."—*ib.*

Spring Wheat—Mr. Isaac Van Bibber of Carroll county, sowed an acre of ground with the spring wheat, and obtained from it eighty-five dozen sheaves of the ordinary size. The Carrolltonian says that a number of farmers in that county

also sowed some of the wheat, and in every instance it proved as productive as wheat sown in the fall.

From the Philadelphia U. S. Gazette.

THE CROPS OF EUROPE AND THE UNITED STATES, AND THE GRAIN MARKET.

We gave yesterday, a notice of considerable length relative to the corn market of London, with a view of following it up with some remarks upon the European markets and crops, and the harvests of our own country. The connexion between these is, of course, intimate, and the subject is one of interest to a majority of our readers.

We think ourself warranted in setting down the wheat and rye crop of this country as large, not only in regard to general yield, but also in reference to the number of acres cultivated. There have been failures in some places, and in some others it is probable that the harvest has not quite fulfilled its early promise; but the average of the crop is good, and the amount of the wheat gathered in, is very great. How is this great crop to be made most serviceable to the producer, to the merchant, and to the business of the country?—This is a question which can only be answered by a reference to the state of the markets and the grain fields of Europe. This is evident, because there is a superflux which must seek foreign markets, and on the state of supply in those markets will depend the price, and consequently the profit or loss, of those who send breadstuffs thereto.

Let us, then, spend a few moments in examining the state of the principal market of grain, and the means of supplying any deficiencies therein beyond our own produce.

Undoubtedly London must be looked to for a solution of all the questions upon the demand and supply of breadstuffs, which concern the United States.

The crop of 1837 was deficient in England to a considerable degree, and to a far greater extent on the continent, say to the north of France. This state of things was early known; and as soon as the harvest of 1837 closed in England, orders to purchase wheat on English account were despatched to all the ports of export of that grain on the German Ocean and the Baltic. Now it is known that these orders were being executed and contracts made under them, from the December following until the middle of May, 1838, about which time, say the latter end of May, all further proceedings under these orders were arrested by the very considerable advance in prices that occurred in the principal ports of the continent, in consequence of the great prospect of a failure of crops in Germany and Poland.

The wheat purchased between December, 1837, and May, 1838, was regularly shipped, and before the 1st of June, it seemed to be coming into the British ports from all parts of the continent. This sudden influx caused a pause in the rise of the article in England; but early in June the demand was animated in Liverpool, and large sales were made in one market day.

Our readers will recollect that our information relative to the London markets is incomplete, there being a chasm (at least in our information) from the 16th of June to the 3d of July: but we find that the weekly average of the 15th of June

is 64s. 11d. and on the 22d it is 65s. 6d. Prices, therefore, of wheat free for home use must advance. Free wheat is quoted in Liverpool on the 3d of July, in the regular price current, fully as high as during the week previous, though the sale was rather dull. This brings us to notice the probability of the introduction of foreign wheat; and in order to form a correct opinion upon this subject, especially as to the rate of duties, it is necessary to recur to the production of the former harvest, or more properly to the stocks on hand.

The stocks remaining with the farmers can only be inferred from facts. The harvest was, it is admitted, deficient. The millers and corn dealers, however, as the farmers seemed anxious to sell, or, to use a technical term, seemed to be free sellers, purchased only to supply immediate demands, as we gather distinctly from the quotations and remarks in the prices current from day to day, and they were in turn as free sellers as the farmers—no wheat was hoarded or laid up on speculation. When Lady day came, (25th of March) and found the corn dealers and millers without stock, and the farmers without their customary deliveries on that pay-day date, there was at once forced upon the public mind the apprehension of a necessity for a large import, and this apprehension has been strengthened by fears of the deficiencies of the coming crops in England.

We have, on the 7th of June, the opinion of one of the most intelligent merchants of England, versed in the corn trade, that a *million of quarters* (8,000,000 of bushels) of corn will be required to be admitted, before the harvest could be made available; and he confidently expected that it would be admitted at a duty of 20s. 8d. to 24s. 8d.; and on the 5th of July, the same gentleman thinks that the duty will be from 19s. 8d. to 20s. 8d.—This implies a reduction which could only take place from a proportionate advance in the price of wheat free for consumption.

As early as the 5th of June, there were strong apprehensions that the growing crop would prove considerably deficient. The root had been killed, and the fine weather, by promoting the growth above ground, showed how much had been destroyed. So extensive and general had been this injury, that on the 5th of July the opinion was entertained that in the most favorable state of weather, there could not be expected an average crop—and it is known that England requires a full average of her own and of the Irish growth, to meet her consumption.

We have above expressed the opinion that a million of quarters of wheat (eight millions of bushels) must be admitted into England before the harvest. What proportion of this can be readily obtained, we are unable to state explicitly, and must, for want of data, trust to conjecture.

In London, on the 4th of June, the amount of wheat in bond was 243,000 qrs., and it is a fair calculation to take the amount in London as half that of the whole kingdom. This assumption is founded on the fact that London is the great market both of corn and capital—it is situated on the east side of the island, and is contiguous to the continent. We find, however, on recurrence to the "Corn Reporter" of July the 2d, that the official return for the whole kingdom gives 527,233 qrs. or 4,217,664 bushels. But Holland is also a competitor with England for wheat, and at Rot-

terdam, on the 25th of June, it is remarked that the duty on bonded wheat introduced for home consumption, was reduced to one shilling, the minimum of duty for wheat admitted for domestic use. This fact has an important bearing upon the subject, because it shows that there is a scarcity of, and of course a demand for, corn in that market.

We have above referred to the fact, that the continental grain fields were not promising, and we may add, that the stock of old wheat, both in England and on the continent, is far less than has been held for many years previous. Of course, then, the demand in *Holland*, as well as in *England*, is to be made upon a reduced stock, and it would seem that English grain dealers regard the subject in this light; because, while they speak favorably of the weather in relation to the grain fields, they at the same time remark that "the duty on wheat from foreign ports is reduced one shilling per quarter this week"—a necessary consequence, of course, of the rise in the price of wheat, and that rise in England shows that the landed interests have not the wheat wherewith to keep down the price, and thus prevent a glut of the market by the introduction of foreign wheat into England; though it would seem that the surplus on the continent is so small, that if any considerable portion was sent to England; that is, if an over drain of the continental ports were to be made, the prices in England would become depressed, and the bonded wheat must return to the ports whence it came, to supply the want caused by its own shipment.

The fluctuations in prices of bonded wheat unknown are not always significant of quantities brought to, or taken out of, market. Much wheat is held on speculation, and the prices of that must always be affected by the money wants of the holder, who will rather force a portion of his speculation upon the market at a reduced price, than to suffer for want of the money invested therein—hence we repeat, that fluctuations afford no criterion to judge of the wants for consumption.

We would add that our remarks are not founded upon the supposition of a failure of the English and continental crops—we believe that both will be less than an average, and the want of stock remaining over from last harvest, will produce the demands which we have anticipated; and as the continental crops cannot supply the demand of England before the harvest, we may suppose that she must look elsewhere.

Should our anticipations prove correct, and the demand for flour in England and Holland more than exhaust the supplies of the continent, it will follow as a matter of course, that the surplus of the large harvest of this country will go towards making a balance of trade in our favor, in different parts of the world. The demand in England, and the want of abilities to supply in the continent, will leave open to our merchants the West India and South American markets; and we may add, that while there has been a diminution of supplies in Canada, there has been a large accession to the means of consumption, so that the flour of the western part of New York will probably find a ready market on the British side of the lake.

From the view of circumstances at home and abroad, we come to the conclusion that a judicious

course on the part of our merchants, and a *let us alone* (*laissez nous faire*) course on the part of the government, will, with existing means at home, and certain wants abroad, place our commercial relations in a most enviable position, rewarding the producer for his toil, and the merchant for his enterprise and risk, and giving to the government in due time the means of paying off its newly created responsibilities, while at the same time it sees the people enjoying prosperity as the fruits of commercial integrity and honest industry.

We are not unmindful while we speak of grain as entering into the means of our national prosperity, that there is a mutual dependence among the great staples of our country, and that our foreign commercial relations, especially those with Great Britain, are best sustained by an average produce and demand for them all abroad.

From the same.

MORE ABOUT THE GRAIN.

In our remarks of the 28th inst. we intimated the probability of a demand for wheat, &c. in Canada. That probability is strengthened by the annexed paragraph, taken from the *Montreal Courier*. It is also to be borne in mind that flour and wheat, the growth of British colonies, pay a very low duty in England, and under an inconsiderable further rise of the general average, will be admitted free of duty for home consumption—The operation of this regulation is to drain from Canada all the wheat of Canadian growth, leaving the consumption of Canada to be supplied from the United States: and perhaps it is not a far-fetched supposition, to assume, as *naturalization* is easy and profitable on this side the Atlantic, that wheat and flower of U. States' growth may be *naturalized* in Canada, and be shipped thence to England with the benefit of *birth-right*. Such things have happened, and the British government finding the trade of the colony promoted, and the wants of bread at home in a degree relieved, have not been scrupulously exact in demanding proofs of *birth*.

At the last prices from England and the duties then payable on colonial wheat and flour, there was encouragement sufficient to call the attention of the merchants of Canada, and the duties would be reduced, for the averages were rising. The last particular average from London yet heard from, was 69s. 8d. It would be brought into account of the next general average, and the succeeding week a lower general average goes off, and the higher one comes in, which will advance the six weeks average that regulates the duty, and diminish the duty.

CANADA—*The Wheat Fly*—We are sorry to learn that the ravages committed by this insect upon the growing crop of wheat are not confined to particular places, but are complained of throughout the whole district. A gentleman left at our office yesterday, a stool of wheat containing seventy-one heads from one kernel, in the whole of which we scarcely saw one not eaten up by the fly. Some farmers say that so great is the destruction, that they will not reap enough for next year's seed, from fields apparently loaded with one of the finest crops ever seen. The barley has not altogether escaped in some places.—*Montreal Courier*.

From the Burlington Gazette.

THE MORUS MULTICAULIS.

It is known to the public a considerable distance round Burlington, that large quantities of this most invaluable tree are now growing in the vicinity of this city. A larger quantity would have been raised the present year, but for the cold wet spell of weather which occurred at the planting season, causing numbers to rot in the ground; this was succeeded by a drought of three weeks duration, accompanied by intensely hot weather, producing effects decidedly more injurious to the young sprouts, than the cold damp which preceded it. From these causes the crop of trees is very far short of what was expected. The plants which survived these disasters, are now growing with a luxuriance of foliage that realizes to the mind by a single glance of the eye, the sterling value of the Multicaulis for the production of silk. It is true that different modes of planting, and a different course of cultivation, have produced different quantities as well as different qualities of trees, some having succeeded better than others. But from the stock of trees now growing, it is certain that the short supply will be more than compensated by the high prices they will command. There can be no doubt that trees will sell higher the coming fall and spring than they have ever done yet. The character of the Multicaulis is now well established in the middle states, from practical acquaintance with it, and it has lived uninjured, in the open fields of Burlington during the whole of the past winter. As its value becomes better known, the demand for it increases from all parts of the United States. The high bounties on the production of silk which are given by the states of New Jersey and Pennsylvania, have been found sufficient to pay all the expense of producing the cocoons and of reeling the silk, making the whole produce clear profit. This fact, when added to that of an acre of ground planted with trees two years old, producing a nett profit of \$300 to \$400 per annum, has stimulated the farmers in various sections of the middle states to embark largely in the business of planting trees for the sole purpose of raising silk.

From notices we have read in our exchange papers, of nurseries in various places, an impression appears to exist that all the trees now growing throughout the country are for sale.—Nothing could be more contrary to the fact; and those persons who expect to make large purchases of trees this fall, will find themselves greatly mistaken. Some growers in our neighborhood could not be induced to sell at any reasonable price. We know one instance of a company which intended going into the business last spring, with a stock of 30,000 trees, being compelled to begin with about 5000 only, such was the impossibility of getting trees. Of all the trees now growing, probably but one-third are raised for sale—full two-thirds being grown to feed the worms. So far as the business has progressed in Burlington, it has answered every expectation that was formed of it. Very great profits have been realized from small lots of ground, and there is every prospect of our ancient city becoming the emporium of American silk.

A proper climate and a suitable range of temperature are decidedly necessary for the production

of good silk. The excessive heat, and the great humidity of certain countries, exert the same effect upon the silk worm as upon the constitution and habits of the inhabitants.—England will never be able to raise the raw material for her manufactures, owing to the great moisture of her climate; and her sole dependence for the support of her manufactories, will, and must be, upon foreign countries. Possessing the capital that she does, combined with the energy, skill, and perseverance of her artisans, is it not probable that she will import the raw material from that country which will afford it the cheapest? She has long been dependant upon the United States for her cotton, and her profits have been immense. Her merchants and manufacturers are justly styled Princes of the Earth. When she ascertains that our country can furnish her with raw silk proportionate to her demand, and at a cheaper price than she can obtain it from any other source, it is natural to suppose that our silk growers will always find a market for the products of their labour in her ports.

It has been satisfactorily proved that the United States can produce silk superior in quality to that produced by any nation whatever. With a climate neither too humid or warm, but exactly suited to the disposition and habits of the silk worm, we must eventually become as famous for our exportation of our raw silk as we are for our cotton. All that is wanting on our part, is a determination to "GO AHEAD," and in a few years we shall be ranked first upon the list of silk growing nations.

But, for years to come, we care not for a foreign market; our immense population, by its demands for the fabric, will cause all the raw material to be worked up within our own borders. We shall no longer look to China, France, or Italy, for manufactured silk, and shall be as independent of them in that respect, as we are in regard to cotton—why then should we delay? Every thing appears favourable, and invites us to the enterprise.

Dr. Pascalis gives the following reasons why our agricultural brethren should engage in the silk business:—

1st. The article of silk added to the other pursuits of agriculture, the more enhances the value of land, that, by it, such parcels as are poor and waste can be profitably employed.

2d. Said produce of standard value according to its quality, is always exchangeable in commerce in all its several conditions, as it is neither perishable nor corruptible.

3d. It is a material for the manufacture of all kinds of filature, for raw silk, of machinery for weaving warping; for building a variety of looms, bringing into use every process of dying, &c. which business being divided and subdivided, affords numerous branches of mechanical industry, by which immense populations in Europe are now prosperously supported.

4th. Nurseries of silk worms create also various branches of business among the poorer classes; the making of hurdles, frames, baskets, &c. gathering mulberry leaves and brushwood, detaching and cleaning cocoons, and many other sorts of employment incident on the management and completion of the culture, as if every individual of the poorest community could not find reaping from it some advantage and profit.—*Silk Grower.*

Silk manufacture.—The New York Star state that such is the success which has attended the manufacture of silk at the establishments in Massachusetts, that the silk company at Northampton determined at their late meeting to raise immediately \$30,000, in addition to the large capital already invested, in order to enlarge their sphere of operations. This company was one of the first that was formed in this country, and had to labor under all the disadvantages attendant on the commencement of a new branch of manufacture, which those recently established have not had to contend with. In one instance a Silk Company, which has only been in operation 2½ years, has divided \$100 on each share, where but \$25 were paid in.

From the Indiana Farmer and Stock Register.

BOTS IN HORSES.

I, for many years, yielded to the current of popular opinion; that the Bot-worms destroyed the horses by eating through the stomach, and of course that this was one of the many evils inflicted upon animal life, for *Adam's Transgression*. But upon reflection I have become convinced that neither the one, nor the other, are correctly founded—I first sought for a reason why God should destroy this noble animal by such a despicable insect—but, finding none, I began to inquire into its natural habits, use, &c., and from observation, have come to the following conclusions:—

Observations.—1st. Wild horses, in a state of nature, are never known to die of Bots.

2d. Domesticated horses, that are allowed to run at large, and unrestrained, never die of Bots.

3d. Horses whose food is not changed, and that are not over heated, or stinted in food, never die of Bots.

4th. The bot worm does not eat through the stomach of the horse but is invariably found attached to his stomach by its tail-end, and goes through tail foremost.

5th. Bots are most apt to hurt horses in the spring and fall, or soon after changing the horse's food from green to dry, or from dry to green.—The theory I would offer upon this part is, that the worm eats of the food that the horse eats, and has its preference of different kinds of food, and that when deprived of its choice food, or stinted in the quantity, it pierces the horse's stomach by means of the horns in its tail, by which, also, it adheres to its position, and thus by continuing to bore deeper, finally gets through. And thus makes holes through the stomach by which the gases and juices of the stomach escapes into the abdomen which occasions, sometimes distortion, and sometimes inflammation of the peritoncum, which soon destroys the horse.

The worm itself is necessary for the health of the horse by piercing (not through) the coats of his stomach, excites his appetite by irritation.—But error in food, that does not satisfy the worm, induces it to commit another error, viz: that of continuing its irritation too long, by which it pierces through the stomach and destroys the support of its own life. Man too often commits the same error, by straining the springs of life too far, in the lap of pleasure brings on sudden and unexpected destruction—why should we be surprised if a worm of the bot kind should err?

Another instance of error in the action of the bots that sometimes they collect in such numbers within the lower orifice of the oesophagus, or swallow as to choke the horse—in these instances the death of the horse is sudden and like one in a fit.

I need not describe the bot, as every one who will open the stomach of that animal can see them. I will now offer a remedy which is already suggested:—

1st. Never change the horse's food from green to dry, suddenly, and perseveringly.

2d. Never change from dry to green, unless you can keep him to the green food for a length of time.

3d. Observe the same rule in changing from corn to oats, or vice versa.

4th. If the horse is seized with the bots, either drench the horse with something the worm will not eat, and that will nauseate it, and destroy its appetite, such as sweetened milk, blood of fresh meat, or guts of fowls, &c.

5th. Or drench him with something that will satisfy the cravings of hunger in the bots, such as green moss off of old logs, or a decoction of moss, green blue grass, &c.

6th. Or which should be first tried—If the horse when found to be sick is not so as to refuse to eat, turn him into a lot of green blue grass, or a wood where different kinds of moss grows, (if in the winter,) and the horse will soon be for making a selection that will quiet the Bots.

These remarks are offered for the interest of man and the comfort of the horse. The attention of the scientific, who take an interest in this useful animal, is particularly called to this subject. And if the observation of others confirms these of mine, I shall feel much gratified, and amply compensated for the time devoted to the subject.

Yours, with much esteem,

S. J. SCOTT.

Greencastle, Ia. June 16, 1838.

Indian Wheat or Tartarian Buckwheat.—This is from Tartary or Siberia, via Germany. It is proposed where our buckwheat is killed by frost or heat, to substitute this. It is cultivated in Pennsylvania, Vermont, and Western New York. It is heavier in the grain and more palatable than common buckwheat, and if properly milled, will give thirty five pounds of flour to the bushel. It does well on the poorest soil, and is not affected by the cold—does not require so much seed per acre, as it branches low and spreads much. It produces 30 or 40 bushels to the acre on ordinary land, and on good land is said to produce from 75 to 100. From 12 to 16 quarts of seed are sown to an acre, though many sow more, and the usual time of sowing is about the middle of June. The land should not be rich, and poor sandy soils that are not worth cultivating for other crops, are said to produce fair crops of this grain. It is used for various kinds of breadstuffs, as well as for feeding hogs, horses, cows, &c. It makes good bread when new, whether eaten warm or cold, having this advantage over common buckwheat, and it mixes well with other grains.—*New York Star.*

[We have a small patch of it growing, and will be able hereafter to speak of it from actual experiment.—*Ed. Far. & Gard.*]

BRIEF HINTS FOR AUGUST.

The pressure of work which farmers are obliged to attend to through haying and harvesting, often causes them to neglect the extirpation of weeds at this time, when they are about going to seed. This should be carefully avoided.

After the second hoeing of corn, the weeds among the crop, of which there always spring up more or less, are suffered to have undisturbed possession, and the ground becomes completely seeded with them by another year. A little seasonable labor would prevent this evil. We observed a piece of ground which was kept clear of weeds last year, and another which was but imperfectly cleared of them; the consequence was, that the crop this season (field beet) which grew on the latter piece, was literally hid with a dense growth of weeds, while the other was comparatively free. Canada thistles, must in no instance whatever be allowed to ripen their seed.

Thistles, mulleins, burdocks, &c., in pastures and fence corners, must be destroyed without fail.

Root crops, as ruta бага, and mangel wurtzel, are liable to be too much neglected after one or two hoeings; they should be kept all the season perfectly clear from weeds, and the benefit they derive from this, and from stirring the earth around them, amply repays the expense of the labor.

With a little pains, it is as cheap to raise a good crop, as a crop of noxious weeds; and seed now selected should be therefore as perfectly freed from foul stuff as possible. If clean wheat is always sowed, we may expect on clean ground, a clean crop; but land will become more and more infested with weeds so long as we sow the seeds with the grain.

Chess being almost universally the worst weed among wheat, no pains should be spared to separate it. It may be done by means of brine, first make strong, and then weakened till the wheat will just sink in it, when the chess, being lighter, floats and is skimmed from the surface. A basket should be used, to let the brine run off the more freely. The wheat should then be spread on a barn floor, two or three inches thick, and about one fifteenth part of air, slacked lime sifted over it and well stirred. This assists the drying, and destroys the smut.

A good fanning mill will clear most of the chess from wheat by passing it through a few times.

No seed wheat should be considered clean, until by repeatedly spreading handfuls of it on a table, no chess can be found. There is not much of what is termed *very clean* seed that will endure this test.

Underdraining should be performed during the dry season, and those farmers who have wet spots of ground in cultivated fields, should no longer delay this simple mode of rendering such land productive. Open drains should never be made but to carry off surface water. No drain for any other purpose should be much less than three feet deep, but an open one this depth must be nine feet wide to prevent the banks sliding, and this is an enormous waste of land. But a covered drain occupies no ground. The expense of digging, from this cause is also much greater in case of open drains.

Covered drains may be filled with stone or brush. The stone may be laid so as to leave a small open

channel at bottom; or if they are quite small, and the quantity of water passing off not large, such channel is not necessary. Brush drains are filled by placing the branches of trees, freshly cut and with the leaves on, in a sloping direction in the ditch, the leaves upwards, and then covering them with earth. The spaces between the branches below allow the water to flow off. This method of filling is best in sandy ground where stones are scarce.

In cutting off underground channels of water, particularly those which ooze out of the surface of sloping ground, by means of covered drains, the mode of operating should be adapted to circumstances. The common error is to cut it at the wet spot, whereas, the proper place is a little *above* before the current reaches the surface. The judgment and close examination alone can direct the proper course and situation for the drain in such cases.

Horses often suffer from slabbering during the latter part of summer, especially when they feed in succulent pastures. The best remedy is dryer food.

Fruit trees are frequently injured in collecting the fruit, by resting ladders against the branches, and thus bruising the bark. Apricots, plums and peaches, often suffer much in this way. The remedy is to use self-supporting ladders, constructed like a common ladder, with either one or two expanding legs of equal length, which serve to support it without any other prop.

Budding or inoculating should be performed while the stocks are growing most rapidly, or while the cambium or mucilaginous substance under the bark is in the greatest abundance. This cements the inserted buds and makes them adhere the better to the wood. Cherries and plums should be budded immediately, but peaches may be deferred three or four weeks later, if necessary. The general rule is, budding may be performed successfully at any time when the bark peels freely.

If the stocks are thrifty; if the bark is carefully cut and raised so as not to injure the cambium; if the buds are cut smoothly off the shoot so that they may be applied closely to the wood of the stock; if the bandages are bound so evenly that they may just maintain this close contract between the bud and stock; and if they are carefully removed as soon as they begin to indent the growing stock, there can be a little doubt of success in budding.—[*Genesee Farmer.*]

From the Germantown Telegraph.

RAISING OF TOBACCO.

Mr. Editor—The more I reflect, the more I am convinced that much will yet be accomplished in our agricultural pursuits, if our farmers will continue persevering in experimenting upon the adaptation of our soil to the raising of foreign crops as they have been doing of late years. Our soil undoubtedly contains more hidden treasures than its most sanguine farmer can be aware of.—These remarks presented themselves forcibly to my mind, upon being shown a sample of cigars, and a caret of leaf-tobacco, said to have been raised and manufactured on the farm of Mr. J. H. SMITH, Cresheim, west of Mount Airy. This gentleman has undoubtedly succeeded well in the way of raising tobacco, not equalled in the United States. The cigars manufactured from the said

tobacco, are of an exceedingly excellent flavor, and in my humble opinion superior to any of the imported I have yet smoked; and it is singular they have a peculiarity about them which is much in their favor: when you have smoked one about half away, you will find it to increase in point of pleasantness; and you will naturally become more and more attached, until finally your lips come in contact with the fire. As a Pennsylvania production, all they want is an unprejudiced trial; for the more you smoke of them, the more you want to smoke!

A FRIEND TO DOMESTIC INDUSTRY.

BEAVER IN NORTH AMERICA.

The natural habits of the Beaver are topics so generally, though often so imperfectly handled, that we will rather speak at present of the manners which it is found to display in a domestic state, and of one or two other particulars less generally known.

We have domesticated certain animals, and most of those only to a certain extent, and are therefore apt to fancy that those are the only animals susceptible of domestication, and that they surpass all others in sagacity and companionable affections. But there is a very long list indeed, of animals, apparently the last to be thought of, for domestication, but which, nevertheless, would please, and be pleased if they, like others, lay in our bosoms, ate out of our dish, and sat at our firesides, and that would make manifest their understanding, and more than answer our caresses. An example presents itself in the Beaver, whose habits in domesticity are pictured by a North American trader.

"I have kept several Beavers," says Hearne, "till they became so domesticated as to answer to their name, and to follow those to whom they are accustomed, in the same manner as a dog would do, and they were as much pleased at being fondled as any animal I ever saw. In cold weather they were the constant companions of the Indian women and children, and were so fond of their company, that when the Indians were absent for any considerable time, the Beavers discovered great signs of uneasiness; and, on their return, showed equal marks of pleasure, by fondling them, crawling into their laps, lying on their backs, sitting like a squirrel, and behaving like children who see their parents but seldom. In general, during the winter, they lived on the same food as the women did, and were remarkably fond of rice and plum-pudding: they would eat partridges and fresh venison very freely, but I never tried them with fish, though I have heard that they will at times prey on them. In fact, there are few granivorous animals that may not be brought to be carnivorous."

Of the things usually eaten by the Beaver, the same writer gives the following account:—"Their food consists of a large root, something resembling a cabbage stalk which grows at the bottom of the lakes and rivers. They also eat the bark of trees, particularly those of the poplar, birch, and willow; but the ice preventing them from getting to the land in the winter, they have not any bark to feed on in that season, except that of such sticks as they cut down in summer, and throw into the water opposite the doors of their houses; and as they generally eat a great

deal, the roots above mentioned constitute a principal part of their food during the winter. In summer they vary their diet, by eating different kinds of herbage, and such berries as grow near their haunts."

Beavers having returned in considerable numbers to Nottaway river and its tributaries, Mr. Ruffin of the Farmer's Register, suggested the propriety of an experiment to domesticate them, with a view to the annual procurement of their rich furs, without destroying their lives. As this inoffensive and valuable animal is rapidly disappearing before the stratagems of the trapper, and the march of civilization, this resort may become necessary if practicable and might perhaps turn out to be a profitable enterprise.—*Ed. Tenn. Far.*

LANCASTER SILK COMPANY.

We have been presented by Mr. Carson, with a specimen of the first silk reeled by him, which is very beautiful, being even, of fine texture and glossy appearance. The process of reeling is now going on at the factory, west end of Chestnut street. The reel used by Mr. Carson was made by his directions, and appears to be an improvement of the Piedmontese reel, which is considered the best one in use. A double crop of silk was made at this establishment the last season; and Mr. C. is preparing for a second the present summer. Those gentlemen who have labored to introduce more extensively into the country this important manufacture, merit the gratitude of the community; and we sincerely wish them a rich reward for their patriotism. The Lancaster company have a thriving plantation of the *morus multicaulis* and Italian mulberry. The cocoons are of a pearly white color, but we neglected to ask whether they were fed promiscuously on both kinds of leaves, or whether but one was used.

[*Lan. Jour.*]

Despatch.—Mr. George W. Smith, of Blockley township, Philadelphia county, has this harvest cut the wheat standing in the field in the morning, hauled it in, threshed and cleaned it, taken it to the mill, had it ground and brought home, had the flour made into bread, and eat part of it before night of the same day.

Bots.—An eminent farmer of Columbia co. N. Y., who has never less than twenty or thirty horses, once stated to me that he always gave each horse a small quantity of ashes twice a week, and never had a case of the bots in his life.

A FARMER.

Good for New Jersey.—Mr. Henry Boughton, of Parsippany, sheared 11 pounds 10 ounces of fleece from off one of his yearling sheep, last week. This we consider equal to any thing on record.—*Democratic Banner.*

Hail Storm.—The eastern part of Bradford County, Pa., was visited by a violent hailstorm on Wednesday, 24th July, which in its course entirely destroyed whole fields of grain. The hail stones were unusually large, and the Argus states, that in some places the ground was covered to the depth of six inches. Orchards were stripped of their fruit, windows broken by hundreds, and the cattle in the fields very much bruised.

Soils that absorb the most moisture, all other circumstances being equal, are considered the most fertile. Sir Humphrey Davy states, "I have compared the absorbant powers of many soils with respect to atmospheric moisture, and I have found it always greatest in the most fertile soils; so that it affords one method of judging of the productiveness of the land."

Many of the most thrifty farmers of the east, grind their hoes, and take a file to their fields to sharpen them when dull, with as much regularity as they take a whetstone with them to the meadow. Those who have never used a ground hoe would be astonished at the comparative ease and expedition, with which he can prosecute his work with that very useful little implement.

TO THE PUBLIC.

Try the New Agricultural Establishment in Grant-street, next door to Dinsmore and Kyle.

Every article warranted to be first rate. The subscribers, grateful for past favors, take this early opportunity of returning their thanks to their customers and the public in general, and beg leave to inform them that they are now provided with a very extensive stock of newly manufactured AGRICULTURAL IMPLEMENTS, suitable to meet the call of Farmers, Gardeners, Merchants, Captains of vessels, and others, viz: 1000 Ploughs, assorted sizes, from \$4 to \$15 each, comprising of the old common Bar Shear, Winand's Self Sharpener; Woods & Freeborn's patent, all sizes, "Davis'," "Sinclair & Moore's" improved Hill Side Ploughs, highly esteemed for turning the furrow down hill, with wrought or cast shears; Wheat Fans, of various sizes and patterns, from \$15 to \$50 each, warranted to separate the garlic from the wheat; Corn Shellers, from \$12 to \$20; Cutting Boxes, from \$7 to \$50 each; Corn and Tobacco Cultivators, large and small; Expanding do., Wheat Cradles, warranted to have fingers of the natural growth, and Grass Scythes, &c. &c.; Castings, of all descriptions and patterns, by the lb. or ton, to suit customers, allowing a liberal discount to merchants buying to sell again—all of which will be furnished on the most pleasing terms and every article warranted to be of the best quality, in proportion to the cost price. All orders by mail or otherwise shall be duly attended to with the greatest despatch.

We would particularly call the attention of Country Merchants and others, wishing to purchase agricultural implements to sell again, to the fact, that we will furnish them with articles on better terms than they can be supplied at any other establishment in the city. Our assortment is complete and as varied as that of the most extensive concern in Baltimore.

We have also connected in its operations with the above branch of business a complete assortment of FIELD AND GARDEN SEEDS, kept by Thomas Denny—Also Garden and Farm Tools, of various sorts and of the choicest collection, which will enable our customers to have filled entire all orders in the Agricultural and Seed Departments. mh 26 JOHN T. DURDING & Co.

TURNIP SEEDS.

5000 lbs. Turnip Seeds of first quality of the following kinds, will be supplied at the very lowest wholesale rates; which will enable vendors to make large profits in selling by the pound, and far larger when selling in smaller parcels.

Purple topped Ruta baga or Yellow Swedish Turnip, White flat Field, White Norfolk, Early White Dutch, Yellow Dutch, Yellow Flat Field, Yellow Aberdeen, Large Yellow Bullock, Long Tankard, Yellow Stone, White Stone, Yellow Maltese, Dale's New Yellow Hybrid, Swan's Egg, Red top or Red Round, Green top or Green Round, and others.

Also, for sale, every other kind of Garden, Flower and Agricultural seeds. A liberal credit to vendors—and priced catalogues will be sent to all who desire.

N. B. 600,000 Chinese *Morus Multicaulis* Trees, 3 to 6 feet high, deliverable in October—and 200,000 *Morus Expansa*, Brussa, and other choice varieties.

WM. PRINCE & SONS,
Flushing, New-York.

july 17 9t

BALTIMORE PRODUCE MARKET.			
These Prices are carefully corrected every Monday			
	PER	FROM	TO
BEANS, white field,	bushel.	1 25	
CATTLE, on the hoof,	100lbs	7 50	8 25
CORN, yellow	bushel.	65	
White	"		
COTTON, Virginia,	pound	9	11
North Carolina,	"	9 1	11
Upland,	"	9 1	11
Louisiana — Alabama	"	11 1	12
FEATHERS,	pound.	45	50
FLAXSEED,	bushel.	1 12	
FLOUR & MEAL—Best wh. wh't fam.	barrel.	9 50	
Do. do. baker's	"		
SuperHow. st. from stores	"	7 00	7 25
" " wagon price,	"	6 75	
City Mills, super.	"	7 25	7 50
" extra	"	7 75	
Susquehanna,	"	7 00	
Rye,	"	4 00	4 50
Kiln-dried Meal, in hhds.	hhd.		
do. in bbls.	bbl.		
GRASS SEEDS, wholes. red Clover,	bushel.		
Kentucky blue	"	2 50	3 00
Timothy (herds of the north)	"	2 25	2 50
Orchard,	"	2 00	2 50
Tall meadow Oat,	"		3 00
Herds, or red top,	"	90	1 00
HAY, in bulk,	ton.	12 00	16 00
HEMP, country, dew rotted,	pound.	6	7
" water rotted,	"	7	
HOGS, on the hoof,	100lb.	7 00	
Slaughtered,	"		
HOPS—first sort,	pound.	9	
second,	"	7	
refuse,	"	5	
LIME,	bushel.	33	34
MUSTARD SEED, Domestic, —; blk.	"	3 50	4 00
OATS,	"	27	
PEAS, red eye,	bushel.		1 12
Black eye,	"	1 00	1 12
Lady,	"		
PLASTER PARIS, in the stone, cargo,	ton.	3 50	3 75
Ground,	barrel.	1 50	
PALMA CHRISTA BEAN,	bushel.		
RAGS,	pound.	3	4
RYE,	bushel.	60	63
Susquehanna,	"		none
TOBACCO, crop, common,	100lbs	4 00	4 50
" brown and red,	"	4 00	6 00
" fine red,	"	5 00	8 00
" wrappery, suitable	"		
for segars,	"	10 00	20 00
" yellow and red,	"	8 00	10 00
" good yellow,	"	8 00	12 00
" fine yellow,	"	12 00	16 00
Seconds, as in quality,	"		
ground leaf,	"		
Virginia,	"	4 50	6 00
Rappahannock,	"		
Kentucky,	"	5 00	8 00
WHEAT, white,	bushel.	1 40	1 50
Red, best	"	1 35	1 42
Maryland	"	1 25	1 35
WHISKEY, 1st pf. in bbls.	gallon.	34	35
" in hhds.	"	32	
" wagon price,	"		bbls
WAGON FREIGHTS, to Pittsburgh,	100lbs	2 25	
To Wheeling,	"	2 50	
WOOL, Prime & Saxon Fleeces,	pound.	40 to 50	20 22
Full Merino,	"	35	40 18 20
Three fourths Merino,	"	30	35 18 20
One half do.	"	25	30 18 20
Common & one fourth Meri.	"	25	30 18 20
Pulled,	"	28	30 18 20

BALTIMORE PROVISION MARKET.			
	PER.	FROM.	TO.
APPLES,	barrel.		
BACON, hams, new, Balt. cured,	pound.	14	15
Shoulders, do.	"	10 1	11 1
Middlings, do.	"	10 1	11 1
Assorted, country,	"	10	10 1
BUTTER, printed, in lbs. & half lbs.	"	16	25
Roll,	"		
CIDER,	barrel.		
CALVES, three to six weeks old,	each.	5 00	6 00
Cows, new milch,	"	25 00	40 00
Dry,	"	12 00	15 00
CORN MEAL, for family use,	100lbs.	1 62	
CHOP RYE,	"	1 50	1 60
EGGS,	dozen.	12 1	
FISH, Shad, No. 1, Susquehanna,	barrel.	9 75	10 00
No. 2,	"	9 50	
Herrings, salted, No. 1,	"	4 25	4 75
Mackerel, No. 1, ——— No. 2	"	10 00	12 00
No. 3,	"		
Cod, salted,	cwt.	3 25	3 37
LARD,	pound.	10 1	11
BANK NOTE TABLE.			
Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.			
U. S. Bank,	par		
Branch at Baltimore,	do		
Other Branches,	do		
MARYLAND.			
Banks in Baltimore,	par		
Hagerstown,	do		
Frederick,	do		
Westminster,	do		
Farmers' Bank of Mary'd, do	do		
Do. payable at Easton,	do		
Salisbury, 1 per ct. dis.	do		
Cumberland,	par		
Millington,	do		
DISTRICT.			
Washington,	Banks, 1 p.c.		
Georgetown,	do		
Alexandria,	do		
PENNSYLVANIA.			
Philadelphia,	par		
Chambersburg,	do		
Gettysburg,	do		
Pittsburg,	2 1		
York,	do		
Other Pennsylvania Bks.	do		
Delaware [under \$5]	do		
Do. [over 5]	do		
Michigan Banks,	do		
Canadian do.	do		
Farmers Bank of Virg.	1 1		
Bank of Virginia,	do		
Branch at Fredericksburg, do	do		
Petersburg,	do		
Norfolk,	do		
Winchester,	do		
Lynchburg,	do		
Danville,	do		
Bank of Valley, Winch. par	par		
Branch at Romney, ...	par		
Do. Charlestown, ...	par		
Do. Leesburg, ...	14		
Wheeling Banks, ...	3 1/2		
Ohio Banks, generally	5 1/2		
New Jersey Banks gen.	3		
New York City,	par		
New York State,	do		
Massachusetts,	1 1/2		
Connecticut,	1 1/2		
New Hampshire,	1 1/2		
Maine,	1 1/2		
Rhode Island,	1 1/2		
North Carolina,	5		
South Carolina,	6 1/2		
Georgia,	8 1/2		
New Orleans,	8 1/2		

ton, and having an Iron Foundry attached to my establishment can furnish any kind of Plough or Machine Castings on reasonable terms and at a short notice.

All repairs done with punctuality and neatness. On hand, a few Patent Lime Spreaders, Horse Powers, &c. &c.

Also just received, a fresh supply of Landreth's superior Garden Seeds. In store, superior Timothy and Orchard Grass Seed and Seed Oats. All implements in the agricultural line will be furnished by the subscriber, as good and on as reasonable terms as can be had in this city, with a liberal deduction to wholesale purchasers. Likewise will receive orders for Fruit Trees from Mr. S. Reeves' Nursery, New Jersey.

JONATHAN S. EASTMAN,
Pratt street, Baltimore,
Between Charles & Hanover sts

feb 20

WATKINS' PATENT WHEAT FANS, HARVEST TOOLS, &c.

THE subscribers, being confident of the superiority of the Watkins' Fan have made arrangements with the Patentee to manufacture the article in this city.

The difficulty of procuring these fans from Washington county in this State, (where they were formerly manufactured) and the high price at which they were sold has much retarded their introduction in our immediate vicinity; they are now manufactured by us at a reduction of about 40 per cent. on original price, and made of warranted materials and by experienced workmen. The Riddles and Screen of this fan are operated upon by a simple crank motion, and the general construction of the fan is such as to give the wind a proper direction and great force on the riddles, thus enabling farmers to clean double the quantity of grain and put it in better order for market than can be done by those in common use. Our assortment of Fans and Harvest Tools are as follows, viz:

Watkins' Patent Fans	\$30.00
do do with unshipping heads	32.00
Common Crank Shake Patent Fans,	25.00
do do do with unship heads	27.00
do Dutch Fans,	20.00
Box Fans; a very complete fan and well suited for small farms,	16.00
Grain Cradles with 4 a 8 fingers and warranted	
Scythes attached,	4.00
do do with wire braces,	5.00
Grass Scythes and Sneaths, in complete order for mowing	2.25
Grain, Grass and Bramble Scythes,	
Sickles and Grass Hooks,	
Scythes Stones, assorted kinds, Ripes for whetting	
Grain Scythes,	
Horse and Hand Hay Rakes,	
Cradlers' Hammers,	
Hay Forks, of sizes suitable for making and pitching hay,	
Threshing Machines, &c.	

ALSO,

Corn and Tobacco Cultivators, Corn Harrows, Field and Garden Hoes, and as usual, a large assortment of IMPLEMENTS AND SEEDS, comprising nearly every variety used by the planter.

ROBERT SINCLAIR, Jr. & Co.
Light street near Pratt street wharf.
june 4 2t

A DURHAM BULL.

For sale, a superior Bull—he is of fine size and unexceptionable pedigree, which will be given next week—he comes from a strain of deep milkers, and is himself the sire of several fine animals. Price \$500.

je 26 3t

CONTENTS OF THIS NUMBER.

Notice of a communication from Powhatan—the supply of breadstuffs, price of wheat, &c.—reports on the culture of spring wheat desired—prospects of the corn crop—buckwheat—turnips—recipe for taking hives without destroying the bees—silk culture in New Jersey—strays, laws relative thereto, &c.—the crops and the drought—produce of spring wheat—crops of Europe and the U. S. and the grain market—the morus multicaulis—prospects of the silk culture in the U.S.—do. at Northampton, Ma.—bots in horses—Indian wheat or Tartarean buckwheat—hints for August—raising tobacco in Pennsylvania—the beaver of North America—Lancaster silk company—despatch in harvesting, &c.—cure for bots in horses—a great fleece—hail storm in Bradford co. Pa.—soils—hint to farmers—prices current—advertisements.

MORUS MULTICAULIS TREES.

The subscriber has from 25,000, to 30,000 Morus Multicaulis trees now growing at his residence, with roots of 1, 2, and 3 years old, which will be ready for sale this fall, and which he will sell on moderate terms.

EDWARD P. ROBERTS.

THE FARMER & GARDENER

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, E. P. ROBERTS AND SAMUEL SANDS—EDITED BY E. P. ROBERTS.

No. 16.

BALTIMORE, MD. AUGUST 14, 1838.

Vol. V.

THIS publication is the successor of the late

AMERICAN FARMER,

and is published at the office, at the N. W. corner of Baltimore and North streets, over the Patriot office, at two DOLLARS AND FIFTY CENTS per annum, if paid within one month from the time of subscribing, or \$3 if after that time. All letters to be post paid.

BALTIMORE: TUESDAY, JULY 14, 1838.

MILLET.

We have often called the attention of our readers to the importance of growing this article for hay, and we would here again impress it upon them, and especially upon those of them residing in the South, where provender is so scarce. It delights in a warm sun and sandy or loamy soil, and will grow in almost any soil naturally rich or artificially made so; may be put in as late as the middle of July, and will yield from 2 to 4 tons to the acre, according to the goodness of the land and nicety of its preparation. When we say that it may be put in as late as the middle of July, we do not recommend that the culturist should delay sowing so long as that; but only mention it in order that, if circumstances should occur to prevent an earlier putting in of the seed, that he may rely on getting a crop as late as that. If we were asked our opinion as to the best time for seeding it, we should say, from the 1st of May till the 1st of June. The heaviest crop we have ever raised was sown on the 14th of May.*

All ground intended for Millet, should be thoroughly ploughed and harrowed: the seed to be harrowed in, and the ground then rolled.

If hay alone be the object of the culturist, one bushel of seed to the acre is the proper quantity: if hay and seed be the object, half a bushel should be sown on that quantity of ground.

It makes a delightful hay, is highly nutritious, and well relished by all sorts of stock.

*Last year we raised a pretty fair crop sown on the 28th July. This fact illustrates the advantage of its culture. Should the crop of grass be short, there will always be time enough after that fact may be ascertained to put in a crop of millet for hay; thus placing it always in the power of the farmer to secure a full supply of hay for his stock.

We see it stated in the Michigan papers of the 18th of July, that the wheat crop had been excellent in quality and heavy in quantity; and that the corn crop promised to be equally good; but as the period to which our information goes, is too early to form any opinion as to what the latter crop may actually turn out, we can only hope that the expectation of our cotemporaries in Michigan, may be realized, and while we indulge most sincerely in this hope, candor compels us to confess that we fear those anticipations may be disappointed. It is known to every one who may have noted the fact, that a long continued drought has extended nearly all over our wide-spread country, blighting in most instances the fondest hopes and brightest prospects ever entertained or promised for a fruitful corn year. A month ago, in every direction, with but few exceptions, the corn fields presented a spectacle of luxuriant growth and healthful vegetation; but alas the scene has been changed—the dark green, nay almost black appearance of the blades, has been succeeded by one which carries a chill to the heart, and defies the hope of even the most sanguine; for no one can in reason expect the stalks to yield when the blades—those prolific feeders—are crisped to the very tassels, and appear as though a fire had passed over almost every field and dried up the very sources of nourishment. To us it appears evident that the season has now so far progressed that even the most copious, oft repeated, and long continued showers, for the balance of the summer and autumn, could not materially improve the condition, or add to the yield, of a great portion of the corn now growing.

In Wake county, N. C., the drought has prevailed for upwards of nine weeks.

The upland pastures in this vicinity, are as parched up, as if that which was once growing vegetation had been visited with fire.

Advice to Farmers.—Judge Buel says, "It has been found that the best and most butter is obtained when the cream is about the temperature of 55 degs.—and if the temperature is over 60 degs. the quality is inferior and quantity diminished.—Hence every dairy should have a thermometer."

THE CROPS.

The Corn Crop—Appearances in our own neighborhood correspond with information from more distant points, in regard to the unprecedented drought by which the soil has been baked for the last six or seven weeks, under the influence of which all vegetation is withering. The following paragraphs from Maryland and Virginia papers will answer just as well for the District of Columbia as for those states:—*Nat. Intel.*

The Corn Crop in Maryland—There is no longer the least hope that the corn crop in this state can be resuscitated. In the counties of Frederick and Washington, the richest in the State, many of the farmers are cutting down the corn-stalks, with the intention of putting the fields in wheat. In many fields the yield will not be half a barrel to the acre. The clover and pasture fields have also suffered dreadfully from the drought, and upon many farms they are already using their hay to sustain their stock. In the limestone region of our state the effects of the dry weather are more perceptible than in other parts, although not an acre any where is exempt.—*Chronicle.*

The drought which has prevailed in this neighborhood for so great a length of time, seems to have been general in all quarters. Many of the corn-fields, particularly in thin lands, have been nearly destroyed, while those in our heavy limestone region will not yield any thing like an average crop. About one inch of rain fell in the neighborhood on Tuesday evening, but from the parched condition of the soil, it was far too little to affect materially the growing crop.—*Winchester, Va. Republican.*

Spring Wheat—So far as we have heard, at home and abroad, the experiments made with the spring wheat have proved successful, notwithstanding the cold and otherwise unfavorable weather at the time of sowing. In the neighborhood of this town as many bushels have been raised to the acre as could reasonably have been expected on the same ground from the winter wheat, even in the present year, when the yield of the latter has been so great.—*Winches. Repub.*

The Corn Crop—In adverting last week to the condition of this important crop, we remarked that, "unless favored by abundant rains within a few days, the crop must be a short one in this county." On Tuesday night last, we were visited by a rain of about three hours, which in an ordinary season would have been of infinite service, but the ground was in so thirsty a condition, and the weather has since been so dry, although considerably cooler, that but little benefit was derived from it. We are now pained to state, upon good authority, that a very large portion of this crop is past all benefit, let the present month be as seasonable as it possibly could be, under the

most favorable circumstances. Some few farmers, who during the excessive drought have been favored with partial showers, and others who have planted at greater than the usual distance on a grass or clover lay, may realize something like an average crop, but for every instance of this kind, there will be ten who will not make half a crop, as many who will not secure a fourth of one, and others whose product either of ears or fodder, will be scarce worth the gathering—of the latter class, a most remarkable instance was mentioned to us a day or two since. The crop of a gentleman residing about six miles from this, promised, some three weeks since to be equal if not superior, to any in the county, one of our informants pronounced it the best field he ever saw; it was of the variety, and of a most luxuriant growth; it is now killed even to the tassell, and he will not, in the opinion of a good judge, make one barrel to the acre. Such is the melancholy prospect for a large majority of the farmers of Kent.—*Bugle*.

The Season—Nine-tenths of our farmers have experienced an unexampled season of drought; and the failure of the corn crop will be the positive result. Our experience of ten years farming gives us no parallel to the present season, either as regards its dryness or great heat. Within the past or present week, we have conversed with persons from various parts of the Eastern Shore, from Delaware, and from Pennsylvania, and it has been as dry in those places as it has been with us. Our papers from Washington, Frederick, Kent and Talbot counties, Maryland, complain of the great dryness of the weather, and the failing of the corn crop. Worcester and Somerset counties on the Eastern Shore, and the district along Magothy, on the Western Shore, are the only places in the state, it is probable, that have not been parched up. We had some rain on Tuesday night, which will assist the latter corn should it continue seasonable—all forward corn has been irretrievably injured. But little corn will be sold from this shore next year.—*Centreville Times*.

Crops—The long-continued spell of hot and dry weather which seems to have been extensively prevalent, must necessarily diminish very much the product of the growing crop of Indian Corn. Indeed, if we be not very soon favored with a copious shower, whole fields will be burnt up, and rendered entirely unproductive. It is fortunate, that the Wheat crop has generally turned out so well. From Michigan, Indiana, Ohio, Illinois, Kentucky, Missouri, and Wisconsin, as well as in the older states, we hear but one report—that of superabundance.—*Lynchburg Virginian*.

The Corn Crop—We much fear that in this region generally the corn crop has suffered beyond the possibility of recovery by the best season to come. Farmers tell us that in any event one-fourth of a crop cannot be looked for by many, and others will have none. In this region by men and beasts, and all living upon it, the loss will be seriously felt. The wheat crop, however, having been every where abundant, and the latest foreign accounts, being more favorable to the crop there, than others previously received, it is certain that all will still have enough and to spare, and

that prices will be regulated accordingly.—*Winchester Virginian*.

The Drought—Amidst the universal agitation of political questions, the state of the weather, as affecting the crops, and alternately darkening or brightening the prospects of the year to come, occupies the first glance of every eye in the morning, and the last hope of every mind in the evening. Our summer has been so dry, that independent of its blighting effects on every thing vegetable, animals can scarcely breathe for the dust; the mill-ponds are nearly all dried up—streams, which before were hardly ever known to fail, can scarcely urge their sluggish currents, and, in many parts of the county, the wells have scarcely a foot of water in them. The Corn crops are so totally burnt up in some parts of Wake, that a second deluge would scarcely bring them to. Seasonable rains, however, would still be of immense service, and greatly relieve the fears of the desponding husbandman. Only think of the parched condition of crops where not a drop of rain has fallen in nine weeks! as has been the case in some parts of our county. A year of scarcity now, added to the actual distress which pervades the land, would cause the stoutest heart to fail. Our county, however, continues very healthy—the butchers having decidedly more business than the doctors.—*Raleigh (N. C.) Reg.*

Large Corn—While the severity of the drought in many places will cut short the summer crops, it is gratifying to find that in some districts the prospects are flattering. A few days ago I was in Delaware, and was delighted to see on the "Vineyard Farm" owned by John Reybold, a field containing 100 acres of a most luxuriant growth, and had the curiosity to measure the height of some of the stalks, and found them varying from 14 feet 1 inch to 12 feet, and generally bearing three ears. Who can beat this?—*Phil. U. S. Gaz.*

BADEN CORN.

We can add our testimony to that of our neighbor N. West, on the fine and promising appearance of the Baden corn. We planted about an acre, but the seed not being good, it came up poorly, and for some time, grew slowly, but latterly it has grown with great rapidity, but being so thin it will not yield so much perhaps to the quantity of ground, but having so much room, it appears as if it would nearly make up for the deficiency, by the very large growth of stalk, and abundance of ears. Our townsman, N. M'Carty, we understand, has 13 acres, planted with seed obtained from Baltimore, which is also very promising; several others in the vicinity, have planted of it, and we hope they will all give us the result of their harvest for publication. If it should turn out as well as it now promises, it will be a great acquisition to our state, and Marion county will furnish seed enough to supply all that may want.—*Indiana Farmer*.

Messrs. Osborn & Willets—From a small quantity of Baden Corn, sent me last season, by the Hon. H. L. Ellsworth from Washington, which was planted in my garden, and cultivated with much care, I was enabled to obtain seed, sufficient to plant nearly ten acres this season. The corn was planted about the 18th of May; but until

within fifteen days, its appearance was decidedly more backward than any near my residence.—Within a few days its growth has been exceedingly rapid; many of the stalks are bent down, by the want of strength to support the weight of the leaf at the top.

This corn is much taller than the kind usually planted here; and the stalk remarkably stout, perhaps nearly double the thickness of the other; the leaf longer and broader, and of course will be more valuable for fodder.

But it is to the extraordinary fruitfulness of the Baden corn, and of which we have now ample promise, that I wish to call your attention. It promises all that Mr. Baden ever gave the public reason to expect of it. On many of the stalks I already notice shoots for seven ears; in some instances eight and even nine: but whether they will produce perfect years, is however yet to be proved. In looking over a field of two acres, which from its elevation, is more forward than the rest, I notice that all the stalks indicate this rare fertility, to a greater or less extent; and good judges are of the opinion, that none of the stalks in this field promise less than three ears.

Should this corn in the fall of the year yield equal to its present prospect, it will certainly be an acquisition to our state. At that time, with your permission, I shall take the liberty of communicating to you more particularly, the result. I have already noted some facts, which I think of some consequence, in case this corn should come into general cultivation.

NATH. WEST.

July 25, 1838.

THE CROPS IN ENGLAND.

We have lately passed through a considerable part of the county, and the crops are so improved by the late weather, that the change is hardly to be conceived. The crops of hay are superabundant, and wheat looks at least as fine as any we remember. Upon the whole, we are quite satisfied, no less by inquiry than observation, that the crop of Norfolk will be fully an average, and probably more than an average.—*Norwich paper*.

In the neighborhood of Lewes hay making is progressing briskly, both in seeds and meadow. The former are generally good, but the latter on the high lands are short: in the brooks and low lands they are better. In the vicinity of Chailley the good effect of using the drain plough 14 inches deep and a rod apart is particularly striking; where this machine has been employed the crop is good, but otherwise it is indifferent. At Hurstbarns, the property of Lord Abinger, the drains have stood fourteen years, and seem to be in an excellent state, the drains wanting occasionally to be open at the ends. The last favorable rains have brought forward the wheat crops, which appear strong and healthy. In the Weald on the Down farms they are generally thin, but the barley and oat crops are good.—*Sussex Express*.

The weather during the past week has been splendid in the highest degree for the operations of landed interests. From every quarter we hear of the fields being filled with plenty; and that on every side "the little hills are shouting aloud for joy." Although some weeks must yet elapse ere

we can shout the "harvest home," still there is much room for thankfulness to Him who is author of seed time and harvest, for having favored us so far, considering that we had one of the most inclement and unpropitious winters and springs ever remembered, and which naturally engendered doubts as to the realization of any thing like average crops. In most of the southern counties we find that the wheat is in full ear, and looks much more promising than it did three weeks ago—it is said "beyond all expectation" in Kent. There is every prospect of an average crop. The same remark applies to oats and barley. Turnips, beans, and peas, are looking beautiful, and growing at a rapid rate. Of the hay crop we can confidently state it is generally abundant, and that, if the weather continue favourable, it will be secured in excellent condition. The clover crops are especially heavy. South of Nottingham a great deal of hay is now cut, and this week's weather has enabled the farmers of the southern and midland counties to lead an immense quantity of hay in good condition, and those north of Trent to cut the grass and put it in a state of forwardness.—*Leeds paper.*

SUFFOLK.—Never did the crops of wheat, barley, oats, beans, or peas, appear in a more flourishing condition than in most parts of this county at the present time.—*Chronicle.*

The apple crops throughout this and the adjoining county will be a complete failure this year, the orchards looking as if struck by lightning. Cider is rising rapidly in price, and the malsters are consequently looking forward to an advance of price.—*Worcester Journal.*

From the N. Y. Commercial Advertiser.

Agricultural Celebration and Ploughing Match, at the Elysian Fields, Hoboken, New Jersey.

The second anniversary of this noble science took place yesterday, under the auspices of the American institute of the city of New York.—We were glad to find that the friends of agriculture are not slumbering, but are up and doing.—We observed on the ground a number of the leading agriculturists of this and the neighbouring states. Out of the large number of ploughs, eight only were entered for competition for the premium, viz: by Messrs. Minor & Horton, Peekskill, N. Y.; Charles Howard, Hingham, Mass.; Henry Beebe, Haverstraw, Rockland co., N. Y.; Cornelius Bergen, Brooklyn, L. I.; Wm. Beach, Philadelphia, and J. D. Ward, Jersey City.

The yoke of oxen owned and driven by Chs. Heritage, was generally admired.

The judges gave as their decision that the ploughs of Messrs. Minor and Horton were entitled to the first premium, and J. D. Ward's to the second. Some of the others deserved especial notice.

Some choice cattle were sold, which brought, in our estimation, very low prices. After the collation, the Hon. Aaron Clark was called to preside.

We must not forget to mention that the mayor of our city took hold of the plough, and handled it with all the ease and effect of a first rate ploughman. Several of the officers of the Institute also tried a hand at it. An elegant full blooded colt,

three years old, from the stock of the celebrated full blood horse Harpinus, and the Messenger, owned and raised by Mr. Jacob Vreeland, of Bergen county, was exhibited and much admired.—The mayor presided at the supper, and made a short but pertinent address, on introducing Mr. Van Duzen, the orator, who spoke for three-fourths of an hour, and delighted the auditory with many happy hits, in his best style. We observed a general expression of approbation among the farmers, who attended in considerable numbers from Kings county and Staten Island.

HARVESTING OF CORN.

As the season is approaching in which the farmers will commence the securing of the abundant crop of corn with which a bountiful Providence has blessed our country, it may be pertinent to the occasion to offer a few remarks upon the best mode of harvesting the crop.

Our Virginia ancestors and those who think it wise to plant and cultivate and gather as our fathers have done, pursue the old method; about this time they gather the blades below the ears of corn—after they consider the corn to be ripe they top the stalks and secure all the fodder in stacks for winter use. In November they pull the corn and remove it to the cribs, where it is husked out at leisure. This mode is rapidly yielding in the stock districts to that first introduced among the graziers on the south branch of the Potomac.—The farmers in the northern and middle districts of Kentucky, and in the Scioto valley of the Ohio, have generally adopted this latter mode; which is to cut the stalks, corn, fodder and all, and place them in shocks commonly embracing sixteen hills square.

I have seen the richest crops of many climates gathered, and there is no operation in husbandry so animating as that of cutting corn in the mode just mentioned. It is a most cheering prospect to see twenty acres of corn pass in one or two days, to a condition in which it is prepared to keep in the field during the winter. This remark is predicated particularly upon the plan of riddling the squares, instead of cutting the whole square at once. It will readily occur to any observing mind, that as corn does not ripen with any regularity, that if the entire square were cut at once, some of the corn will mould and sometimes even the fodder will be affected, if the cutting shall be followed by warm or wet weather. To avoid this contingency, some graziers commence with the process of riddling, that is, they select only such part of the sixteen hills square as may be ripe—go through the field in that way, and in ten days complete the cutting of the square. By this process several important advantages are obtained, the greatest amount of fodder is secured consistently with the paramount object of saving the corn, and a nucleus for the shock being formed by the first cutting in the square, the shock becomes settled and stands better during the winter. In the rich counties of Clark and Bourbon, they sometimes cut half the square on one side and then in ten days finish it. Whilst many graziers in Fayette, Lincoln and Shelby, prefer the process of riddling.

In the course of October and November, these shocks are shucked out, the corn placed in cribs and two of the shocks placed together, or one

placed on the ground and two others put around it. It is the opinion of practical farmers that the practice of cutting corn in this mode secures the greatest amount of corn fodder with the least expense, and is decidedly an improvement on the old Virginia plan, more especially when applied to the feeding of cattle or mules.—*Franklin Farmer.*

(From the Franklin (Ky.) Farmer.)

MANAGEMENT AND DISEASES OF HOGS.

To Chilton Allan, president of the Kentucky State Agricultural Society.

I have seen in a late number of the Franklin Farmer, your circular address, calling upon the friends of improvement for essays upon a number of important subjects relating to the agricultural interests and pursuits of our state. Approving heartily the noble objects of the State Society, I read your address with great satisfaction; and I cannot but believe, that the action of the Society will bring about the most gratifying results in improving the science of agriculture, and hence the condition of the husbandman; for I cannot doubt, that every one who desires improvement himself and who would derive useful information from others, will hold himself bound to contribute something to the general stock of knowledge.—There are few intelligent farmers who do not know something unknown to others, and it is by an interchange of sentiment and opinion as well as of experience and practice, that the farmers of the country will be able to see and reject the errors of their husbandry and adopt those modes instead, which lead to improvement and success. In this view, I offer an humble tribute, which at least has the merit of a well meant design of benefiting others in some respects.

The commencement of our prosperity may be dated from the period when our agriculturists turned their attention to the raising of stock for export; and as the consumption and demand have increased in a ratio with the increase of population and wants of the people of the United States, the business has become a source of wealth to Kentucky. And no where has the improvement of stock been so great and so general, nor more zeal and perseverance manifested to procure the breeds of horses, asses, cattle, sheep and hogs. In enumerating these descriptions of stock, the last is not the least important in bringing wealth to the State, and should be looked to with a fostering care and attention.

Under this belief, I humbly submit to the public through you, the following observations on the management of hogs, with some remarks on some of their diseases.

In giving my views on these subjects, I deem it important to state some of the various ways of raising, feeding and fattening hogs in different sections of the country, which, according to circumstances, soil and climate will differ; and conclude with my views as to the best mode to be adopted by the farmers of Kentucky under her peculiar circumstances. In Europe and many parts of the United States, hogs are indispensably kept in pens or styes, and as the numbers raised are comparatively small, there is no great expense attending the manner of feeding them; indeed, this is the most economical, cheap and convenient method of fattening that could be adopted in any

country where the number fed is small. In some of the New England States large buildings have been erected for raising and fattening hogs on an extensive scale, fed almost exclusively on vegetables produced on a few acres of land, which gives a profit of 50 per cent. more than any other way in which the products of the land could be disposed of. On this extensive scale, the business is unconnected with any other, having for its object, the raising and fattening of hogs alone, for it requires the most strict attention which daily habit and the most scrutinizing observation, in time reduced to a perfect system, can give. It was ascertained to a fraction, what each hog would eat at a meal, which was measured out to him three times a day, the quantity according to age, allowing six of the same age to occupy a sty, which was regularly littered and cleaned out once a day. The amount of vegetables required per day, and the necessity of the different varieties coming on in due season, would require great attention. At the first view of the subject, we would conclude that a piggery conducted in like manner in Kentucky, would be equally profitable. But not so—there would be this difference:—The price of pork and lard in Boston is more than 50 per cent. higher than in Louisville: and the profit accruing from the superabundance of manure, which is worth from two to three dollars a load in the New England States, will amount to a large sum, which with us would be excluded from the estimate, as it will bring nothing here on sale, though useful to the land on which the hogs are fattened. In 200 hogs annually sold, these causes would produce a difference of perhaps three thousand dollars in favor of the New England piggery.

Say 200 hogs at 200 lbs. each,	40,000
lbs. pork at 10 cents in Boston,	\$4,000
For their manure,	1,000
	\$5,000
40,000 lbs. pork at Louisville at 5 cts.	2,000

Leaving a difference in favor of the N.

England piggery, 3,000

In no way could an extensive piggery be made profitable to us but by being connected with a distillery. The expenses would then be much lessened; for it would require but a few vegetables or a little meal added to the slop of the distillery to make the swill highly nutritive. They might be put to graze in the summer and swill given them occasionally and again put in the fall.

The manner of feeding and fattening hogs now generally adopted in this State, seems to me to be well calculated for our method of cultivation.—Taking into consideration the products and the great number of hogs fatted for other markets, together with the great number of beef cattle annually grazed and fed, the system is complete. In winter, they are amply supplied with food from the refused corn and pudding of the cattle—two or three hogs to each head of cattle finding thus abundant sustenance. In the spring, when the cattle are no longer fed, the hogs are put on the exuberant clover field, which was sown for the double purpose of enriching the land and supplying rich food for their cattle and hogs. In due time, when the clover becomes hard, and unfit for the hogs, it is given up to the earth, and they

are removed to the rye fields there to fatten and complete another system of manuring, so admirably adapted to our lands and our wants. So soon as the rye field is consumed, the corn field is ready to receive them,* and in due time they are ready for market, leaving the fields and pastures richer than they were.

Although this arrangement is good for feeding and fattening, yet there are other important matters in relation to their raising and health, which in no wise should be neglected. Experience has taught me, that no matter how many pigs a sow has over six, they should be reduced to that number always retaining the large and healthy ones; for I can and will demonstrate that six pigs will make more pork at 12 or 18 months old, than eight would of the same litter—and eight will make more than ten. Give to the six the food which you would give the eight or ten and you will find in the result, the truth of my statement proven. It is essential that pigs be kept fat while sucking, and to have them so, six is a better number than eight or ten. At weaning time or when sixty days old, the time when the sows decline in milk, particular attention should be paid to the pigs, having them regularly fed either with corn or swill, for at this juncture, they are unaccustomed to *root for themselves* and will rapidly lose their flesh and their health, and their growth will be retarded, if left to shift for themselves. If they are kept fat during the fall, when provisions are plenty and cheap, they will keep thrifty and well through the winter, on very moderate feeding; but I prefer liberal feeding throughout. The food is by no means thrown away as you will have more pork and not any more corn consumed in the end.

Hogs should be kept free from diseases; particularly the disease of worms, which is very pernicious and a constant attendant on poor hogs. Liberal feeding at all times, is the best preventive; *but when it is not in the crib*, brimstone, spirits of turpentine, or tar mixed with their food will remedy the evil. All hogs are more or less subject to worms; but some are so overcharged, that their intestines are literally filled with them, and unless they are extirpated, it is throwing away corn to feed them, for in this condition it is almost impossible to fatten them; they will consume twice as much, as a hog will not troubled with them, as the nutritious juices are taken up by the worms, and their fetid excrement is all that is left as a miserable substitute for sustenance.

The most fatal disease of hogs is the swelled throat or quinsy. This too, is easily prevented. I have long been of the opinion that it proceeds from indigestion, caused by feeding on hard grasses or clover in their declining state; and my successful practice as a preventive for the last eight

* We presume our writer does not intend to be understood, that the hogs are turned into the corn field; for though this practice may be adopted by some, the more general custom is to put them in a large pen adjoining, into which the corn is thrown. If the corn is not sufficiently ripe when the rye is consumed, old corn is fed to the hogs; and indeed, the feeders generally, we believe, prefer beginning to feed them on old corn after they are put up—introducing the new rather cautiously and gradually.—Ed. F. Farmer.

years is a strong confirmation. Yet it matters not concerning the cause, provided there is a remedy. The disease in the last stage, is highly inflammatory, but at no time infectious. It is an accumulation of matter formed between the glands of the jaw, which continues to inflame till the hog dies of suffocation. The disease may be cured before and after the matter begins to form; but as it may be more satisfactory to state my experience and knowledge on the subject, I will give an instance as coming under my observation, and conclude with my practice as a cure and preventive. In 1830, I discovered the disease among my hogs by the death of one of my fattest. As soon as possible, I had them removed from the clover field, and put in a spacious pen, where they were fed with as much corn as they would eat after it was glazed with tar and as much ashes put on as would adhere to the grains. They still continued to die till I lost to the number of fifteen. This great number dying out of eighty, caused me to doubt the efficacy of the remedy or that the disease was too rapid for its effect.—Shortly after, they were put up to fatten, which they did very readily, and I was left in doubts as to the effect of the medicine, until the day I butchered, when I found lumps of coagulated matter in the jowls of many, about the size of a hazel nut or larger, without any signs of inflammation around them. I then came to the conclusion that they would have died had it not been for the remedy applied and that the disease of those that died had advanced too far to be cured by any remedy. Observing that hogs kept in styes never had the quinsy, I attributed it to the wholesome quality of food they ate, and on the contrary, the cause of their having it out of styes, to the pernicious qualities of hard dry grasses. Since 1830, I have invariably given my hogs during the spring and summer months when grazing, slop or swill once a week or oftener, consisting of kitchen slop with cooked vegetables of various kinds, apples, &c., with bran or a little meal, mashed to a paste, salted and cooled off by adding a quantity of water, and occasionally brimstone or saltpetre.—Since the above date, my attention has been directed to the raising and fattening of hogs on the products of a small farm, and have never yet lost a hog by this disease nor in my recollection by any other. My opinion is still further supported as to the cause of the swelled throat, by its being less frequent since the practice lately adopted in putting the hogs to graze when the clover is young and tender, and taking them off when it is old and tough.

Every body knows that the young and old hogs should be kept apart in winter; and yet how shamefully this important matter is neglected by many. Young and old, great and small are crowded together, day and night, mashing and smothering; and yet many will look on with heedless regard at the great destruction of their young stock, without separating them. When young and old are fed together, the old will always get more than their share, thereby the young become poor and diseased, making little or no progress in growth.

The breed of hogs best calculated for our general purpose is yet to be ascertained. Within a few years, great exertions have been made, at considerable expense, to procure the best breeds, but

whether any of them answer our expectations, I think very doubtful. The breeds imported here, were improvements made to suit the purposes of others under different circumstances, different soil and climate, different food and management, and under a different method of disposing of the pork; and according to our present mode of farming; thus differing from the methods abroad, whence these hogs have been brought, and our surplus pork being chiefly driven to the south, I think ultimately they will not do except in the event of the successful completion of the rail road from Lexington to Charleston. Then the smaller and earlier matured hogs, the Byfields, the Berkshires, the Bedfords, &c., will be more profitable than the larger breeds. But should this all-important improvement to the West, prove abortive, the hog that will be best calculated for our interests, is yet to be improved by some judicious cross from our present great variety of breeds. The fat varieties, as the Bedford, Berkshire, &c., from their early propensity to fatten, are best for family use and home consumption; but owing to their incapability to travel, they must measurably give way to the longer legged hog, until the rail road from Lexington to Charleston is complete.

BIRD SMITH,
Member Ky. State Ag. Society.

IMPORTANT TO FARMERS.

A few weeks since we published a communication from a correspondent, giving the results of an experiment in planting corn, by Hart Massey, Esq. of this village. Mr. Massey called upon us on Saturday last to correct an important error in said communication, and invited us personally to examine said field, which we accordingly did, and now give the results of our observation.

Mr. Massey took of the seed corn with which he planted the field, a small quantity, and soaked it in a solution of sal. nitre, commonly called salt petre, and planted five rows with the seeds thus prepared. The remainder of the field, we believe, was planted by the same individual. Now for the result. The five rows planted with corn prepared with saltpetre, will yield more than twenty-five rows planted without the preparation. The five rows were untouched by the worms, while the remainder of the field suffered severely by their depredations. We should judge that not one kernel saturated by saltpetre was touched, while almost every hill in the adjoining rows suffered severely. No one who will examine this field can doubt the efficacy of the preparation. He will be astonished at the striking difference between the five rows and the remainder of the field.

Here is a simple fact, which if seasonably and generally known would have saved many thousands of dollars to the farmers of this county alone in the article of corn. It is a fact, which should be universally known, and is, in all probability, one of the greatest discoveries of modern times in the neglected science of agriculture. At all events, the experiment should be extensively tested, as the results are deemed certain, while the expense is comparatively nothing.

Mr. M. also stated as the result of another experiment tried upon one of his apple trees last spring. It is a fine thrifty healthy tree, about 25 or 30 years old, but has never in any one year, produced over about two bushels of apples; while

in blossom last spring, he ascended the tree and sprinkled plaster freely on the blossoms, and the result is, that it will this season bear 20 bushels of apples. Now if the plaster will prevent blast, it is a discovery of great importance. Mr. M. was led to make the experiment by reading an account of trees adjoining a meadow where plaster had been sown at the time there was a light breeze in the direction of the orchard, the trees contiguous to the meadow bearing well, while the others produced no fruit.—*Watertown (N. Y.) Standard.*

THE SILK CULTURE.

We incidentally alluded some days since to the large amount of silk worms and *Morus Multicaulis*, which one of our citizens (A. M. Jerome) was feeding and raising. Since that time we have visited the farm of John S. Van Dyke, in this vicinity, who has commenced the culture of the mulberry and silk worms with an enterprise and in a manner highly creditable to himself and the state.

Judge Van Dyke commenced the business this spring on a moderate scale, as an experiment, and has already produced 36½ lbs. of cocoons, for which he received the first premium given in New Jersey under the new law for the encouragement of the culture of silk. The specimens of reeled silk raised this season, produced by the Judge at Trenton, at the time he received his premium, elicited the warmest commendation from Gov. Pennington, the Secretary of State, and a large number of gentlemen from different parts of the state, who happened to be in Trenton at the time.

The excellent order and neatness displayed by the Judge in his different arrangements is highly commendable.

He has now in progress a series of experiments in relation to feeding the worms, mixing the different kinds, &c. &c. the results of which he intends to communicate for the benefit of the community, if they should prove of sufficient importance.

He has four different kinds of worms, from one of which several successive broods are obtained in one season, which appears to us to be a grand desideratum. Hitherto the kind in common use, produced *only once in a season*, and then, they generally hatched about one time, as soon as the weather became warm, and frequently before there was sufficient foliage to sustain them.

The frames used for the worms to feed and form cocoons on are the improved kind used in New England—as is also the reel to reel the silk from the cocoons, and of the most simple, useful and durable kind, costing only five dollars.

Judge Van Dyke has also several thousand Chinese (*Morus Multicaulis*), Italian, Alpine, and Brussa, (from near Constantinople) and other mulberry trees, in as thriving a condition as any we have seen this season any where. His ground (a kind of sandy loam,) and culture, appears peculiarly adapted to the raising of the mulberry in the highest state of perfection.

Besides viewing these interesting advances and improvements made by the Judge, we visited the establishment of Messrs. Chaffee and Gilmore, who have rented a few acres of his farm, on purpose to carry on the culture of silk extensively. Messrs. C. & G. are two of a company of eight, who left Connecticut this spring, to test the advantages of different locations in the culture of silk;—two of

the company located themselves at Belvidere, N. J.; two at Harrisburg, and two at Columbia, Pa. From the best information received, we are inclined to the belief that part of the company located in this vicinity have succeeded by far the best.

They have a house which is entirely devoted to the business, in which every thing is arranged with admirable order and cleanliness; they have now about twenty thousand worms feeding, which will be followed by a succession of broods, as each preceding one is disposed of, until cold weather destroys the foliage. They have besides sold several hundred dollars worth of eggs the season. Messrs. C. & G. have about twenty or thirty thousand *Morus Multicaulis*, besides some ten thousand of *Multicaulis* seedlings, all in fine order, and in a high state of cultivation.

Besides the persons alluded to above we know of a considerable number in Princeton and its immediate vicinity, who have a large number of the *Morus Multicaulis* in a thriving condition, which bid fair to furnish a rich harvest for their labor and the small amount of capital invested. One gentleman of this place,* a few days since, sold *four thousand dollars worth*, and another *fifteen hundred dollars worth*, all to be delivered this fall, the last at twenty seven cents each, for sprouts of this season's growth.

We trust if business proceeds this way, soon to see our healthy and thriving town and neighborhood as noted for its advances in the interesting and valuable culture of silk as for the well known celebrity of its literary institutions.

Princeton (N. J.) Whig.

* Attorney General Field, we believe,—Ed.

COB MEAL AND COB MILLS.

A friend and correspondent in Ohio has requested some information as to the value of cobs ground with the corn, and the cheapest and best mill for grinding them together.

That a very great saving is effected in feeding animals by grinding their food does not admit of a doubt; and the explanation of the fact, as given by Raspail and Dutrochet, is perfectly satisfactory. It is also certain that when nutritive matter is properly divided and incorporated with some substance suitable for the action and distention of the stomach, that a much less quantity will suffice, and the animal be in equally good condition.

It is on this principle that the English custom of substituting cut straw for hay in feeding with grain, a saving of one half of the expense being made by feeding with cut straw and ground grain, over feeding with hay and unground grain, according to the old mode. Neither the straw, or the cob, contain any great amount of nutriment in themselves, but they assist the digestive functions, and render the accompanying nutriment more available. The cob however has much the advantage of straw in every respect; and experience shows that those lose much who waste this important part of the corn crop.

Some interesting experiments have been recorded in the N. E. Farmer on the subject of fattening animals on corn and cob meal. The Rev. Mr. Perley in describing his method of using the food says:—

"I have for several years practiced having my corn and cobs ground together; breaking the cobs

fine by pounding, and grinding one peck of corn with a bushel of the cobs. Meal made of this composition, I scalded, and made about as thick as common hasty pudding, or mixed about one peck of the meal with about three pecks of boiled potatoes, thickened to the consistency of pudding. There were no hogs in the neighborhood grew so fast, or were fit to kill sooner in autumn."

In the Massachusetts Agricultural Repository is a communication from Mr. Rice of Shrewsbury, in which he says:

"The very best provender I have ever used for fattening cattle, is corn and cobs, ground together. The reason I consider the cob useful is, it swells in the creature, and keeps him in good order; in no one instance since I have fed with this meal, have my cattle been out of order by being cloyed, or scouring; they are at all times regular; but when I formerly fed with clear Indian, or oats and Indian, these difficulties frequently occurred, and they would lose as much in two or three days, as they would gain in a week. The second year that I made use of this kind of provender, I thought I would try an experiment, by feeding one ox with corn and oats ground; the other with corn and cobs, having one yoke oxen so equally matched that no one who viewed them, appeared satisfied which was best. The cob is computed to make a little more than one third therefore I mixed the other with one third oats, which was my former mode. I gave each ox an equal quantity at a time, except that the one which had corn and oats some days became dainty, and would not eat his allowance; while the one fed with cob meal kept on his regular course. When taken to market and slaughtered, the oxen weighed 29 hundred and a half, the one fed on corn and oats had 162 lbs. of tallow, and weighed about half a hundred more. The one fed on cob meal had 163 lbs. of tallow, and the butcher pronounced his meat half a dollar in the hundred better than that of the other."

In the third vol. of the Philadelphia Society for promoting Agriculture, is an excellent paper by Dr. Mease, in which the utility of grinding the cobs with the corn is clearly shown both from analogy and actual experiment. And we believe that wherever it has been tried, or wherever the means of grinding can be had, it has been approved, and will be found of great value.

So far as we are acquainted, cobs after being broken, are ground in the common millstones with the corn. The same machinery used for grinding Plaster of Paris or gypsum, has been found efficacious for grinding cob meal; the plaster cracker reducing the cob sufficiently for the action of the stones. Mr. Buckminster speaking of machinery for this purpose says,—"for making cob meal we placed in our mill a pair of large stones, cut the eye of the runner 12 inches at top, and 14 or 15 inches at bottom, and bosomed it out large, as we term it. In this manner it answers every purpose for grinding and cracking corn in the ear."

The cast iron bark mill has been used for cracking cobs to some extent, and where a mill is convenient to grind the cobs and corn after cracking, would answer a good purpose; and we can see no reason why one constructed on the same principle, and like those worked by a horse or water power, might not be constructed to reduce the cobs and corn sufficiently fine to answer instead of the ordinary process of grinding. It must be re-

membered, however, that the goodness of cob meal must always in a great measure be depending on its fineness. Where it is an object to provide a mill of this kind, any farmer who has a horse power threshing machine, may with little expense procure ordinary millstones, and by attaching a cracker as for a plaster mill, or arranging the stones themselves as recommended by Mr. Buckminster, have a mill not only useful for grinding cobs but all the grain he intends for feeding. As the power required would be lessened, as the velocity was decreased, two horses would run a pair of millstones it is believed with as much ease, as four do the larger threshing machines.

SAVING CLOVER SEED.

The two great objects to be attended to, in raising clover seed with profit, are—First, to secure the production of as large a crop to the acre as practicable—and Secondly, to harvest the crop in such a manner, as to bring as large a portion of the seed into the barn and to leave as small a portion of it as possible in the field.

To attain the first object, that of securing a product, we have in our preceding numbers, in observations on culture of clover, given the necessary directions; we will now only repeat, that the main things to be attended to are the following—1st. That the land be fertile.—2d. That it be well prepared before sowing the seed, as heretofore directed.—3d. That a sufficient quantity of seed be sown to the acre.—4th. That it be evenly distributed over the ground.—5th. That, whenever the land requires its aid, gypsum or plaster be sown on the clover—and 6th. That it be not injured by injudicious or excessive grazing. If these particulars be well attended to, an acre of ordinary land will produce three bushels of seed in a common season, often more.

We come now to speak of the more difficult and laborious operation of safely and economically harvesting and securing it. This requires care and attention. The great objects to be aimed at are, to cut the seed at the period when there is the largest portion of ripe seed on the ground, in that stage of maturity, which will admit of its being collected into the barn, and so to handle it, as to prevent the seed from being shattered off and left on the field, while the straw or haulm only is collected in the barn. It is, we believe, to the improvident and ruinous neglect of strict attention to these two latter objects, that most farmers may attribute their failure in making clover seed. We will lay before our readers the results of our own observation and experience, on these important points, hoping that those of our patrons, who may have discovered a better mode of effecting these objects, than the one recommended, will yet communicate to us their practice in time to enable us to lay it before the public in our next number.

TIME OF CUTTING.

As the clover seed, from the time the first heads ripen, until the close of the season, are daily arriving at maturity the great desideratum is, to ascertain the precise period when there is on the ground the greatest portion of ripe seed, in a state which will admit of its being collected and brought into the barn. If the clover be cut before this period, there must evidently be a loss sustained from the immaturity of too large a portion of the

seed. If the cutting be deferred beyond this period, an equal, and perhaps a greater loss will be sustained, from the impossibility of saving the seed first ripened, generally the best, on account of its being so easily shattered off. We would recommend, as the most eligible time for cutting, the period when about two-thirds of the heads have become ripe and assumed a black color, many of the others, at this time of a brown color, will ripen after cutting.

MODE OF CUTTING.

Where the clover has not lodged, and is high enough to admit of it, by far the most expeditious, and in every point of view the most eligible mode of cutting, is to cradle it as we do grain, only throwing it into double swarths, that is, laying the clover cut form two lands in one swarth. If the grass be so short as to require it, a strip of linen may be fastened on the fingers of the cradle so as to prevent the heads falling through them.

MODE OF CURING.

If the crop be not heavy and the weather be good, swarths may lie undisturbed for several days, until the hay be perfectly cured; it should then, in the morning or evening while sufficiently moist from the dew, to prevent its shattering off too easily, be gently raked in small bunches, such as can be conveniently raised with a fork and laid on the wagon. When not too damp, these bunches should be hauled to the barn, and either stowed away in mows, or which is best, thrashed off, and either immediately cleaned, or else the heads stowed away in a room prepared for the purpose until winter, to be then threshed or trodden out. But should there be rain on them, or should they be suffered to remain in the field any considerable length of time after being raked up, these bunches must with a fork be gently turned bottom upwards, and laid in a new place, after every rain to which they may be exposed, and after every two or three days they may have lain in the field in fair weather. This is necessary to prevent the seed from being injured by the heat and moisture to which they will have been exposed from the sun, the rain, and the moisture of the earth. After being sufficiently cured, while dry, let the seed be gently laid on the wagon or sled, and hauled to the barn, using every necessary precaution to ensure, that as little of it as possible be left in the field or scattered along the road.

MODE OF CLEANING.

Various methods are practiced, for cleaning the seed from the chaff. The only two as far as we know, used in this country, are treading it out with horses, or cleaning it in a threshing machine. The first is tedious, laborious, filthy and unwholesome both to man and beast, the latter is far preferable in every respect, but as all are not provided with threshing machines and as therefore many must still continue to tread out their seed, we will submit a few observations on the mode of performing this operation. Having covered the barn floor with seed in the chaff to the depth of from 12 to 18 inches, put on the horses and tread one day, the next morning run the chaff through a fan, much of it will have been beaten to dust and will be blown away, as will also the light chaff, having no seed, and that from which the seed has been separated, but much the larger portion of the seed,

still enveloped in the chaff, will be found in the rear of the fan; this having been separated from the empty chaff adjoining it must be again spread on the floor, and having added another portion of untrodden chaff the horses must be again put on and made to tread it another day, when it should be again run through the fan as before; the produce of this, will far exceed that of the first day's treading, but still, much good seed will be found immediately in the rear of the fan not yet separated from the chaff—this must be again spread on the floor, and a new addition be made of untrodden chaff, and this process must be repeated until the whole crop is trodden out. The seed, after passing through the fan, should first be run through a sieve, sufficiently coarse to permit the clover seed to pass through a finer sieve, retaining the clover seed, but permitting the passage through of all smaller substances; by these two processes, the clover seed will be thoroughly cleansed from all kinds of filth and prepared for market. The only advantages derived from cleaning the seed rather than sowing it in the chaff are the ascertaining with greater certainty the quantity sown and the ensuring a more equal distribution of the seed—where, therefore, a sufficient quantity can be afforded to ensure the desired thickness in every part of the ground, sowing in the chaff, will not only do as well, but it is to be preferred, as it is believed more likely to come up and to stand.

In reply to our correspondent's 3d query, as to the time of ploughing under clover for wheat—we would recommend that it be done so soon as a considerable portion of the seed has become ripe—the wheat should then be sown and well harrowed in, but the land should by no means be again ploughed, until the wheat has been taken off.

As to briars and sedge grass, we refer our subscriber to what we have said in former numbers, and in the present—the sedge grass, he will find easily subdued, if the ground be ploughed and harrowed in the winter; pasturing and deep ploughing are the only effectual modes we have tried for extirpating briars and sprouts; we have much confidence however in the efficacy of the mode described in the receipt published in this number.

Harmon's threshing machine will thresh out, if properly attended to, from 5 to 10 bushels of clover seed, and from 150 to 200 bushels of wheat per day. This machine will cost about fifty dollars, exclusive of the house and mill-wright's work; this is the only machine for cleaning clover seed used in this part of the country—of which we are apprised; we have used it for two years past with great advantage, especially in cleaning clover seed.

[Genesee Farmer.]

The legislature of Maine, by a law of the last session have exempted from attachment, the plough, cart, harrow of the farmer, and the necessary tools used by hand in agriculture.

A bounty has been offered for the production of corn for the first thirty bushels raised, seven cents per bushel,—for the quantity between thirty and sixty bushels, three cents—for the bushels of grain exceeding sixty, two cents each.

A similar bounty is bestowed for the cultivation of wheat—ten cents the bushel for twenty

bushels—for the quantity between twenty and two hundred bushels, six cents each—and for each bushel over two hundred, three cents.

Silk.—A letter to the editors, from a gentleman in the southern part of the county, dated 25th June, says, "My silk worms are now two weeks old, and in about four weeks more they will probably all be spinning, when I shall have a day or so to spare before gathering the cocoons, and shall visit Zanesville, that I may arrange for sending them to market. I expect to have 150 or 200 bushels.—Zanesville (Ohio) Sun.

The Earth in this region has been parched and burnt up for a fortnight. Corn has wilted, vegetables are dried up, the grass dead, and potatoes have suffered almost beyond redemption. On Sunday night, the thirsty earth was refreshed by a powerful rain, and again Monday, a shower of most generous magnitude literally deluged the earth. It has been of immense value to the crops, and the Farmers, who had begun to despair of their harvest, no longer indulge despondency. The drought extends all over New England, and as far South as Virginia, where every thing pleads for water.—Northampton (Massachusetts) Couri.

Fine Stock.—Some time since Gen. Thomas H. Shelby, of this county, challenged the breeders of Kentucky to an exhibition of mules, to take place in Lexington, on Monday, the 9th of July. The challenge was not accepted. The day arrived, and Gen. Shelby exhibited two lots, amounting to 125 in number. One lot, which was intended to fill the challenge, containing about 60—and they were pronounced by all good judges, to be the finest mules ever bred in Kentucky.—Lexington (Ky.) Obs.

The Weather.—We discover that in several places in the interior the hot weather has exceeded that in most of the cities. In Baltimore on the 29th and 30th ult., in the office of the American and other places, the thermometer ranged from 92 to 96°. At Staunton about the same time it stood at 98°. At Romney, it was as high as 100°. At Williamsport, Md. on Friday it stood at 102°. In this place it ranged variously, during the hot days from 90 to 100, being altogether the hottest and driest July for 10 years.—Winchester Virginian.

SILK GROWING IN FLORIDA.

A correspondent of the Albany Evening Journal, writing from St. Augustine says:—

"All the experiments of our ancient city the present season in silk making, are successful and interesting. We have, at this time, growing, in our sandy but luxurious soil and appropriate climate, nearly one million of *morus multicaulis* trees of various sizes. Our light lands must prove equally good (for silk culture) with our cotton and sugar soils; and we shall supply silk for the whole American consumption and for exportation. Hundreds are preparing to enter upon silk growing and there will be a rush for Florida at the final close of the Indian war. We have our thousands and tens of thousands of orange trees that will bear another season, and thus restore this delightful

fruit to our own country.—Our oranges were considered the largest and best in the New York market. We have a delightful summer, and enjoys its usual health."

Pigs should be washed occasionally in suds.—It prevents the mange.

A SETTER DOG.

FOR SALE—A Setter Dog of handsome appearance, 15 months old, thorough-bred and well broken for his age. He ranges finely and is staunch on the set. His price \$30.

Applications for him to be made to the editor of this paper—all letters to be post paid. aug 14

TO THE PUBLIC.

Try the New Agricultural Establishment in Grant-street, next door to Dinsmore and Kyle.

Every article warranted to be first rate. The subscribers, grateful for past favors, take this early opportunity of returning their thanks to their customers and the public in general, and beg leave to inform them that they are now provided with a very extensive stock of newly manufactured AGRICULTURAL IMPLEMENTS, suitable to meet the call of Farmers, Gardeners, Merchants, Captains of vessels, and others, viz: 1000 Ploughs, assorted sizes, from \$4 to \$15 each, comprising of the old common Bar Shear, Winand's Self Sharpener; Woods & Freeborn's patent, all sizes, "Davis," "Sinclair & Moore's" improved Hill Side Ploughs, highly esteemed for turning the furrow down hill, with wrought or cast shears; Wheat Fans, of various sizes and patterns, from \$15 to \$50 each, warranted to separate the garlic from the wheat; Corn Shellers, from \$12 to \$20; Cutting Boxes, from \$7 to \$50 each; Corn and Tobacco Cultivators, large and small; Expanding do., Wheat Cradles, warranted to have fingers of the natural growth, and Grass Scythes, &c. &c.; Castings, of all descriptions and patterns, by the lb. or ton, to suit customers, allowing a liberal discount to merchants buying to sell again—all of which will be furnished on the most pleasing terms and every article warranted to be of the best quality, in proportion to the cost price. All orders by mail or otherwise shall be duly attended to with the greatest despatch.

We would particularly call the attention of Country Merchants and others, wishing to purchase agricultural implements to sell again, to the fact, that we will furnish them with articles on better terms than they can be supplied at any other establishment in the city. Our assortment is complete and as varied as that of the most extensive concern in Baltimore.

We have also connected in its operations with the above branch of business a complete assortment of FIELD AND GARDEN SEEDS, kept by Thomas Denny—Also Garden and Farm Tools, of various sorts and of the choicest collection, which will enable our customers to have filled entire all orders in the Agricultural and Seed Departments. mh 26 JOHN T. DURDING & Co.

TURNIP SEEDS.

5000 lbs. Turnip Seeds of first quality of the following kinds, will be supplied at the very lowest wholesale rates; which will enable venders to make large profits in selling by the pound, and far larger when selling in smaller parcels.

Purple topped Ruta бага or Yellow Swedish Turnip, White flat Field, White Norfolk, Early White Dutch, Yellow Dutch, Yellow Flat Field, Yellow Aberdeen, Large Yellow Bullock, Long Tankard, Yellow Stone, White Stone, Yellow Maltese, Dale's New Yellow Hybrid, Swan's Egg, Red top or Red Round, Green top or Green Round, and others.

Also, for sale, every other kind of Garden, Flower and Agricultural seeds. A liberal credit to venders—and priced catalogues will be sent to all who desire.

N. B. 600,000 Chinese *Morus Multicaulis* Trees, 3 to 6 feet high, deliverable in October—and 200,000 *Morus Expansa*, Brussa, and other choice varieties.

WM. PRINCE & SONS,

july 17

3t

Flushing, New-York.

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every Monday

	PER	FROM	TO
BEANS, white field,.....	bushel.	1 25	
*CATTLE, on the hoof,.....	100lbs	6 00	7 50
†CORN, yellow.....	bushel	1 00	
White.....	"	1 00	
COTTON, Virginia,.....	pound	9	11
North Carolina,.....	"	9½	11
Upland,.....	"	9½	11
Louisiana — Alabama.....	"	11½	12
FEATHERS,.....	pound.	45	50
FLAXSEED,.....	bushel.	1 12	
FLOUR & MEAL—Best wh. wh't fam.	barrel.	9 00	
Do. do. baker's.....	"		
SuperHow. st. from stores	"	7 00	7 25
" wagon price,	"	6 75	
City Mills, super.....	"	7 25	7 37
extra.....	"	7 75	
Susquehanna,.....	"	4 00	4 50
Rye,.....	"		
Kiln-dried Meal, in hhd.	hhd.		
do. in bbls.	bbl.		
GRASS SEEDS, wholes. red Clover,	bushel.		
Kentucky blue.....	"	2 50	3 00
Timothy (herds of the north)	"	2 25	2 50
Orchard,.....	"	2 00	2 50
Tall meadow Oat,.....	"		3 00
Herds, or red top,.....	"	90	1 00
HAY, in bulk,.....	ton.	12 00	16 00
HEMP, country, dew rotted,.....	pound.	6	7
" water rotted,.....	"	7	
HOGS, on the hoof,.....	100lb.	6 75	7 00
Slaughtered,.....	"		
HOPS—first sort,.....	pound.	9	
second,.....	"	7	
refuse,.....	"	5	
LIME,.....	bushel.	32	33
MUSTARD SEED, Domestic, —; blk.	"	3 50	4 00
OATS,.....	"	27	
PEAS, red eye,.....	bushel.		1 12
Black eye,.....	"	1 00	1 12
Lady,.....	"		
PLASTER PARIS, in the stone, cargo,	ton.	3 50	3 75
Ground,.....	barrel.	1 50	
PALMA CHRISTA BEAN,.....	bushel.		
RAGS,.....	pound.	3	4
RYE,.....	bushel.	80	
Susquehanna,.....	"		none
TOBACCO, crop, common,.....	100lbs	4 00	4 50
" brown and red,.....	"	4 00	6 00
" fine red,.....	"	5 00	8 00
" wrappery, suitable	"		
for segars,.....	"	10 00	20 00
" yellow and red,.....	"	8 00	10 00
" good yellow,.....	"	8 00	12 00
" fine yellow,.....	"	12 00	16 00
Seconds, as in quality, ..	"		
" ground leaf,.....	"		
Virginia,.....	"	4 50	6 00
Rappahannock,.....	"		
Kentucky,.....	"	5 00	8 00
WHEAT, white,.....	bushel.	1 45	1 55
Red, best.....	"	1 40	1 45
Maryland.....	"	1 35	1 40
WHISKEY, 1st pf. in bbls.....	gallon.	38	
" in hhd.....	"		
" wagon price,.....	"		
WAGON FREIGHTS, to Pittsburgh, ..	100 lbs	2 25	
To Wheeling,.....	"	2 50	
WOOL, Prime & Saxon Fleeces, ..	pound.	40 to 50	20 22
Full Merino,.....	"	35	40 18 20
Three fourths Merino,.....	"	30	35 18 20
One half do.....	"	25	30 18 20
Common & one fourth Meri.	"	25	30 18 20
Pulled,.....	"	28	30 18 20

*Our quotation of last week we fear was too high, having been inadvertently misinformed—that of this week may be relied upon. We mention this because a mistake in the price of so essential an article may cause great inconvenience to both buyers and sellers.

†The price on Saturday was 88c for white and yellow, and yesterday morning a respectable house of extensive dealings told us it might safely be quoted as in our price current at \$1 per bushel.

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,.....	barrel.		
BACON, hams, new, Balt. cured....	pound.	14	15
Shoulders,..... do.....	"	10½	11½
Middlings,..... do.....	"	10½	11½
Assorted, country,.....	"	10	10½
BUTTER, printed, in lbs. & half lbs.	"	25	31
Roll,.....	"		
CIDER,.....	barrel.		
CALVES, three to six weeks old....	each.	5 00	6 00
Cows, new milch,.....	"	25 00	40 00
Dry,.....	"	12 00	15 00
CORN MEAL, for family use,.....	100lbs.	1 62	
CHOP RYE,.....	"	1 75	
EGGS,.....	dozen.	12½	
FISH, Shad, No. 1, Susquehanna, ..	barrel.	9 75	10 00
No. 2,.....	"	9 50	
Herrings, salted, No. 1,.....	"	4 25	4 75
Mackerel, No. 1, ————No. 2	"	10 00	12 00
No. 3,.....	"		
Cod, salted,.....	cwt.	3 25	3 37
LARD,.....	pound.	10½	11

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

U. S. Bank,.....	par	
Branch at Baltimore,.....	do	
Other Branches,.....	do	
MARYLAND.		
Banks in Baltimore,.....	par	
Hagerstown,.....	do	
Frederick,.....	do	
Westminster,.....	do	
Farmers' Bank of Mary'd, do	do	
Do. payable at Easton,.....	do	
Salisbury,.... 1 per ct. dis.	do	
Cumberland,.....	par	
Millington,.....	do	
DISTRICT.		
Washington,.....	do	
Georgetown, } Banks, ½ p.c.	do	
Alexandria,.....	do	
PENNSYLVANIA.		
Philadelphia,.....	par	
Chambersburg,.....	do	
Gettysburg,.....	do	
Pittsburg,.....	2½	
York,.....	½	
Other Pennsylvania Bks. 2	do	
Delaware [under \$5].... 4	do	
Do. [over 5]..... 1½	do	
Michigan Banks,..... 10	do	
Canadian do..... 10	do	
VIRGINIA.		
Farmers Bank of Virgi. 1½	do	
Bank of Virginia,.....	do	
Branch at Fredericksburg, do	do	
Petersburg,.....	do	
Norfolk,.....	do	
Winchester,.....	do	
Lynchburg,.....	do	
Danville,.....	do	
Bank of Valley, Winch. par	do	
Branch at Romney,.... par	do	
Do. Charlestown,.... par	do	
Do. Leesburg,.... 14	do	
Wheeling Banks,.... 3½a4	do	
Ohio Banks, generally 5a6	do	
New Jersey Banks gen. 3	do	
New York City,.... par	do	
New York State,.... do	do	
Massachusetts,..... 1½a2	do	
Connecticut,..... 1½a2	do	
New Hampshire,.... 1½a2	do	
Maine,..... 1½a2	do	
Rhode Island,.... 1½a2	do	
North Carolina,.... 5	do	
South Carolina,.... 6a7	do	
Georgia,..... 8a10	do	
New Orleans,..... 8a10	do	

FARMERS' REPOSITORY
OF AGRICULTURAL IMPLEMENTS AND EAST
MAN'S CYLINDRICAL STRAW CUTTERS
IMPROVED.

THE Subscriber informs the public that he has secured by letters patent his late and very important improvements on his Cylindrical Straw Cutter, by which improvements they are made more durable and easier kept in order. All the machinery being secured to an iron frame the shrinkage, wear and decay of wood is avoided. The feeding part of his improved machine is upon an entire different principle from the former machine; far more durable, requiring neither skill or care to keep it in order. These machines are so constructed as to make the freight on them less than half what it cost to ship the former or wood machines, an important desideratum to purchasers living at a distance; and I now offer it to the public upon the credit of my establishment as the most perfect machine in existence for the same purpose. They are also adapted to cutting rags for paper making, and for cutting tobacco as manufactured by Tobaccoists, &c.

I also keep these machines on hand made as heretofore with my new feeding machinery attached to them; and also a general assortment of Agricultural Implements, as usual. Elliott's Horizontal Wheat Fans, and Fox & Bolland's Threshing Machines are both superior articles.

My stock of Ploughs on hand are not equalled in this city either for quality, quantity, or variety. I have a large assortment of Plough Castings at retail or by the

ton, and having an Iron Foundry attached to my establishment can furnish any kind of Plough or Machine Castings on reasonable terms and at a short notice.

All repairs done with punctuality and neatness. On hand, a few Patent Lime Spreaders, Horse Powers, &c. &c. Also just received, a fresh supply of Landreth's superior Garden Seeds. In store, superior Timothy and Orchard Grass Seed and Seed Oats. All implements in the agricultural line will be furnished by the subscriber, as good and on as reasonable terms as can be had in this city, with a liberal deduction to wholesale purchasers. Likewise will receive orders for Fruit Trees from Mr. S. Reeves' Nursery, New Jersey.

JONATHAN S. EASTMAN,

Pratt street, Baltimore,

Feb 20

Between Charles & Hanover sts

WATKINS' PATENT WHEAT FANS,
HARVEST TOOLS, &c.

THE subscribers, being confident of the superiority of the Watkins' Fan have made arrangements with the Patentee to manufacture the article in this city.

The difficulty of procuring these fans from Washington county in this State, (where they were formerly manufactured) and the high price at which they were sold has much retarded their introduction in our immediate vicinity; they are now manufactured by us at a reduction of about 40 per cent. on original price, and made of warranted materials and by experienced workmen. The Riddles and Screen of this fan are operated upon by a simple crank motion, and the general construction of the fan is such as to give the wind a proper direction and great force on the riddles, thus enabling farmers to clean double the quantity of grain and put it in better order for market than can be done by those in common use. Our assortment of Fans and Harvest Tools are as follows, viz:

Watkins' Patent Fans	\$30.00
do do with unshipping heads	32.00
Common Crank Shake Patent Fans,	25.00
do do do with unship heads	27.00
do do Dutch Fans,	20.00
Box Fans; a very complete fan and well suited for small farms,	16.00
Grain Cradles with 4 & 8 fingers and warranted	
Scythes attached,	4.00
do do with wire braces,	5.00
Grass Scythes and Sneaths, in complete order for mowing	2.25
Grain, Grass and Bramble Scythes,	
Sickles and Grass Hooks,	
Scythes Stones, assorted kinds, Ripes for whetting	
Grain Scythes,	
Horse and Hand Hay Rakes,	
Cradlers' Hammers,	
Hay Forks, of sizes suitable for making and pitching hay,	
Threshing Machines, &c.	

ALSO,
Corn and Tobacco Cultivators, Corn Harrows, Field and Garden Hoes, and as usual, a large assortment of IMPLEMENTS AND SEEDS, comprising nearly every variety used by the planter.

ROBERT SINCLAIR, Jr. & Co.

Light street near Pratt street wharf.

June 4

2t

A DURHAM BULL.

For sale, a superior Bull—he is of fine size and unexceptionable pedigree, which will be given next week—he comes from a strain of deep milkers, and is himself the sire of several fine animals. Price \$500. je 26 3t

GROUND PLASTER OF PARIS,

Of superior quality, in bbls. on hand and for sale by
JONA. ELLICOTT & SONS,
may 8 3t south end of Patterson st.

CONTENTS OF THIS NUMBER.

Culture of millet for hay—crops in Michigan—drought in North Carolina—do. in Maryland—to make butter—the corn crop, drought, spring wheat, &c.—Baden corn in the west—crops in England—ploughing match under the direction of the American Institute—on harvesting corn—management and diseases of hogs—important experiment in planting corn—the silk culture in New Jersey—cob meal and cob mills—mode of saving clover seed—encouragement of agriculture by Maine—drought in Massachusetts—fine stock of mules in Ky.—comparison of the weather—silk growing in Florida—advertisements—prices current.

THE FARMER & GARDENER

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, E. P. ROBERTS AND SAMUEL SANDS—EDITED BY E. P. ROBERTS.

No. 17.

BALTIMORE, MD. AUGUST 21, 1838.

Vol. V.

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BALTIMORE: TUESDAY, AUGUST 21, 1838.

CULTURE OF WHEAT.

As the period has now arrived when the farmer should be directing his attention towards the preparation of his ground for his crop of fall wheat, and as this grain is one of the great staples of our country, we have thought it might be serviceable to lay down some general rules for its culture, and to make such suggestions as might appear to be called for by the occasion.

SOIL AND PROPER MANURES.

The soil best adapted to the growth of wheat has been proved by experience to be clays, (the red the best,) or loam mixed with clay; good wheat, however, may be grown on sandy land aided by a ley of clover turned under. But whether the soil be either the one or the other, it is absolutely necessary that a portion of *lime*, in some of its forms, be present in the earth to ensure a good crop: so essential is this mineral, and so powerful its effects, that from two to three per cent. has been found sufficient. When we say that *lime* is absolutely necessary, we do not pretend to affirm, that wheat cannot be grown upon soil where it does not exist; but we do aver, that it cannot advantageously be cultivated without it, and this will appear the more reasonable when the fact is considered, that both the kernel and straw contain *lime* in their composition, the which must be taken up from the earth in the food of the plants while growing.

The proper manures for wheat land, is a subject of deep importance, and before we designate the proper kind, we will remark as general rules—1. That long, or unfermented manures never should be *immediately* applied to the wheat crop: 2. That whatever manure may be applied, *lime*, in some of its combinations and forms, should comprise a part of it, unless the land on which the wheat is to be grown possesses the mineral naturally, or may have been previously limed. If

it be not convenient to apply a full dressing to the land, a very small modicum for all present purposes will answer—say from three to four bushels to the acre of fine lime, sown by hand on the surface of the ground, after the wheat is in, will do.

Soaper's ashes, whether of the *black* or *barilla* kind, is, perhaps, the very best manure of all others to dress wheat land with. From 100 to 200 bushels to the acre is the proper quantity; the former kind is, doubtless, the most prompt and efficient in giving character and quantity to the first succeeding crop.

Marl, whether clay or shell, is a most excellent manure, and when applied judiciously, and in proper quantities, will prove of present as well as of lasting benefit to the soil. It should, if possible, always be strewn over the ground the winter previous to being ploughed in. From ten to twelve cart-loads to the acre is sufficient for a first dressing.

Crushed bones or *bone dust*, in the proportion of from 25 to 50 bushels to the acre, exert a most healthy action in the growth of wheat, besides leaving behind it an effect, which will last for years.

Slaughter house refuse, as blood and offals of all kinds, have been found eminently suited to the habits of wheat.

Thoroughly rotted barn-yard or other vegetable or animal manure, in the proportion of from 15 to 20 double cart-loads to the acre never fail to ensure a good crop; but if lime be absent from the soil, it, or some other calcareous substance, must be supplied, and may be put in as we have before premised.

Marsh mud mixed, in the proportion of 20 cart-loads, with 50 bushels of lime to the acre, and permitted to decompose in the heap, forms an excellent compost for wheat grounds.

Burnt clay is another resource, which will be found on trial to be a good top dressing, in the proportion of from 200 to 300 bushels to the acre.

Salt, in the proportion of 15 bushels to the acre will not fail to secure a good crop, and leave the ground in good tilth.

Plaster of Paris, in the proportion of two

bushels to the acre, applied when the wheat first comes up, pushes forward the grain in the fall, encourages the growth of white clover, and repels that of weeds.

PREPARATION OF THE SOIL.

If the field to be cultivated in wheat be a *clover-ley* or grass-sward, plough it at least *seven inches* deep. If it be a tenacious clay, let the furrow-slice be so cut as to meet at the shoulders, so that there may be left a drain to carry off any superfluous water. If it be a loam, let the furrow-slice be turned over so as to lay flat, as that position is the best to encourage and carry on the decomposition of the vegetable matters turned in, as also to prevent the dragging up of the sods in the after-work of preparation.

The field being thus ploughed, if you have time set your rollers to work, and go thoroughly over the field: when this is done, pass your harrows well over it, then sow your seed, and plough it in with the seed plough, about 3 inches deep.

If the soil be a *stiff tenacious clay*, subject to baking and spewing up the grain, it will be best to leave your field in this condition until spring, when it should be harrowed *crosswise*, and rolled after sowing your clover or other grass-seed on the ground just after being newly harrowed.

If the soil be a *loam*, after ploughing in your seed, harrow and then roll it. We make this distinction between ground subject to baking, and *loam*, which is not, because the latter will be in a condition in the spring following for the operation of the harrow, whereas the latter will be found not quite in so congenial a state for such work.

If farmers were generally to adopt the practice of harrowing and rolling their grain fields as early in the spring as the ground is sufficiently dry to allow of it without *poaching*, the very best effects would flow from it. While the harrowing would serve as a *working* or *cultivation* to the young plants, and thus push forward their growth, the double operation of harrowing and rolling would bury, and thus save, many stools of wheat which might have been spewed up, or thrown out by the frost, which otherwise would have been lost by the exposure of their roots upon the surface of the ground.

We have said, that wheat grounds should, where practicable, be ploughed at least 7 inches deep, and we will here give our reasons in support of that opinion. It is known that the small fibrous roots of the wheat plant penetrate the earth to a great extent in search of food. In some instances they have been traced to a depth exceeding two feet. Since then, it is their nature thus to descend, it must be obvious, that the greater the body of pulverized earth they have to pass through, the better, as the less difficulty they experience in their downward course, the less obstructions they may meet with, the more profitable will their labors prove, and the more vigorous will they grow. In times of drought, it must be also obvious, that deeply ploughed grounds afford the greatest protection, affording as they do pasture measurably beyond the reach of the intense heat of the sun. Again, should the season be a wet one, deep pulverized ground furnishes a medium by which the roots of the plants may be relieved from the deleterious effects of any superabundance of water, by means of the drainage thus provided. View the subject in whichever light we may, common sense and reason concur in the propriety of deep ploughing and thorough pulverization of the soil.

PREPARATION OF THE SEED.

All extraneous bodies and substances should be carefully separated from the kernels of the wheat. All *weed-seed* may be separated by means of a riddle or sieve. After being winnowed, let the grain be thrown into vessels of clean water, in small parcels, and thoroughly washed. Stir the grain well and skim off all floating substances.—After it is thus washed and cleaned, put it into a pickle made so strong of salt as to float an egg: in this it should remain from 24 to 48 hours, then strain it off through baskets, and to every bushel of wheat add 2 quarts of fresh powdered lime, (slaked,) and one of Plaster of Paris: mix the lime and plaster thoroughly with the wheat; after which it should be dried and sown as speedily thereafter as possible, though it will not injure by remaining a day or so, provided it be not kept in too great bulk.

There are other *soaks* strongly recommended—as

Solutions of Copperas;

“ “ Blue-stone;

Ley of Wood ashes;

“ Potash,

Lime water, (cold);

Solution of Arsenic;

“ “ Nitre; and

Boiling water.

But the one we have first named, we believe, will be found most convenient and equally salutary.

QUANTITY OF SEED TO THE ACRE.

Less than 6 pecks to the acre we think should not be sown, and under peculiar contingencies we should not hesitate to sow from 2 to 2½ bushels.

If the ground be good, well prepared by deep ploughing and thorough harrowing, and the seed be put in early, six pecks to the acre will be enough, as under such circumstances the loss from the failure of the seed to vegetate, and the freezing out of the plants, will be much less than if sown late.

If the ground be not good, and the seeding late, allowance should be made for the loss of seed by the causes before alluded to; for it is a fact that a much greater quantity of seed grain perish in poor than in rich ground, and it is equally true, that a much greater amount of growing grain is lost when sown late than when put in early. Allowances for these things should always be made; nor should the farmer be inattentive to the fact that the kernels of some wheat is much larger than those of others, in which latter case an allowance should also be made, as a bushel of such wheat contains a much less number of kernels than the smaller kind.

TIME OF SOWING.

The best time of sowing, we believe to be from the 1st September till the 1st of October: many persons recommend both earlier and later periods of sowing than either of these, but all things considered we believe those we have named the best.

GENERAL REMARKS.

We have no doubt in our mind that in many instances too little wheat is sown, and hence it is that the wheat fields are mostly covered with worthless weeds, which while they extract the substance from the earth and thus rob the wheat of its food do not in the least benefit either the soil or its owner. Hence it is that we have always been the advocate of heavy seeding and of sowing clover seed on all grain fields as early in the spring as practicable. By the occupancy of the soil with grass plants the growth of weeds is excluded in a great degree, and when the wheat is ripe, your ground will have a covering of young clover to protect it from the scorching rays of the sun.

The Grain Market—Our report of the markets in another part of to-day's American records the extraordinary fluctuations which have attended the value of Corn within the past week. We stated that on Monday prices had risen to \$1 per bushel, but the decline since then has almost been as rapid as the rise, for yesterday sales were made

at 86 cents per bushel. The recent rains, which have been the means of saving parts of crops that in many cases had previously been given up for lost, have doubtless had their influence in reducing prices from their late elevation.—*Balt. American of Saturday.*

Corn has again gone up in price; it ranged, yesterday, from 90 to 91 cents, and we apprehend will maintain good prices, as from present prospects the growing corn crop must inevitably prove a lamentable failure.

White Carrots—We see it stated in one of our cotemporary periodicals, that a new variety of white carrot had been lately introduced into the culture of Great Britain, and the hope expressed that it would be propagated for seed. This new white carrot is not the newest thing under the sun, as Sir Humphrey Davy gave its analysis a quarter of a century ago!!

Use of Swallows—While engaged some days since, in preparing a piece of ground for turnips, our attention was arrested several times by the vigilance of a number of swallows, in keeping off crows from our corn-field. The appearance of the sky indicated rain, and the crows, as is their wont, manifested a disposition to satisfy their hunger ere it set in, and came in numbers with that view. No sooner, however, did they approach the verge of the corn, than a bevy of swallows, which appeared to have been laying in ambush, sallied forth and drove the voracious crows beyond the field; when they had effected this, they would return, and diving into the body of the corn, disappear from sight. But no sooner did the crows return, or a new body of them come from another quarter, than those faithful sentinels emerged from their hiding places, and assuming hostile ground expelled the intruders from the field, ere they had a chance to snatch even a scanty meal. As we occasionally rested from our labour, and cast our eyes upon these faithful self-appointed guardians of our interests, faithfully discharging an arduous duty of their own election, we could but respond in grateful accordance to the justness of the sentiment, that God had made nothing without its use. Here was a few diminutive birds, without fee or reward, and unbidden, undertaking, by instinct, the performance of a toilsome labor—of a labor over which many a faithless man would have slumbered and permitted the crows to glut their appetites. What a lesson of wisdom might the self-assumed monarchs of creation draw from these feathered inhabitants of the air! How inimitably superior to many of them are they in all that is useful in conception of duty, or faithful in its performance.

Timothy—If you intend putting in timothy this season, it is time you were bestirring yourself about getting your ground in order for its reception, as the sooner it is in this month, the better will it be able to resist the effects of winter. Do not sow less than a peck of seed to the acre, and if you wish an extra and clean crop of hay, you would do well to add half a gallon more of seed.

Herds Grass or Red Top—Those who wish to reap the full advantage of a crop of this grass should set it down early in September. Let the ground be finely prepared, and a bushel of seed be sown to the acre.

Turnips—We would again call upon our agricultural brethren to put in an additional quantity of turnips, as from every prospect the corn and potato crops will be very, very short. The turnip, though not a highly nutritious root, is one well relished by cattle, hogs and sheep, and as the discreet farmer will see the propriety, under present circumstances, of providing an extra quantity of food to fill up the deficiency arising from the shortness of the two crops we have just alluded to, we are sure he will agree with us in the opinion, that there is no other resource left him at this advanced stage of the season but turnips. An acre of good ground, without manure, if well prepared and managed, would yield from 200 to 400 bushels, and if manured, 5 or 600. Indeed, an acre of stubble, in good tilth, turned down deep, and thoroughly pulverized, would bring 200 to 250 bushels, and surely this should induce the provident to profit by the occasion. A crop of turnips may be put in as late as the 1st of Sept.

The Corn Crop—Some weeks since we advanced the opinion that under the most favorable circumstances not more than from $\frac{1}{2}$ to $\frac{3}{4}$ of an average crop of corn could be raised; subsequent information, personal observation, and reflection, induce us to believe, that not more than one-fifth of an average crop throughout the United States will be raised; in Maryland it will be much less. The late rains came too late to do much good. We rode by a lot of corn of perhaps 10 acres a few days since, and was so struck with its wretched appearance that we were induced to get down and walk through it. The blades were scorched and curled from the earth to the tassel, and we do not undervalue it when we say, that in our opinion, if it were to rain an hour or two every day from now till corn gathering time, it would not produce 1 bushel on the whole lot. Much other corn that we saw in a ride of 40 or 50 miles was

in a most deplorable condition, and we may safely assert, that in our whole ride we did not see a single field that will make half a crop, though we saw many whose produce would not be worth the cost of the labor of gathering.

The Sea Island Crop—The Charleston Mercury says—We regret to learn from a respectable planter of Edisto, the Cotton crops on the southern side of that island are so much burnt up by drought and the late excessive heats, as to be almost destroyed.

For the Farmer and Gardener.

DUTTON CORN.

Mr. Roberts,—I have in my possession several samples of the Dutton Corn raised this summer. That the farmers of the middle States may be induced to avail themselves of the advantages of this variety of corn, I will state briefly its character. It is ready to harvest in three months from the time of planting; this secures it against the drought of the latter end of July and August.—The crop is always as large, and is capable of being made much larger than that of the common late corn. The corn is more valuable, being heavier than common corn. And, lastly, the crop is off the ground, leaving it ready for a crop of turnips, for fall seeding in grain and grass, &c. Two of the samples I have were raised and presented to me as follows:

Mr. Giles of the Franklin Bank, planted his Dutton corn on the 17th of May, and the samples were left with me on the 15th of August, perfectly ripe, and in fine condition. Two days less than three months.

Mr. Harrison planted his Dutton corn on the 16th May, and gathered it on the 14th August.—It is well filled and well ripened. This also is two days less than three months.

But suppose the corn had been planted in the middle of April, as it might have been; it would have come off the ground much earlier. Now it does seem to me that farmers should plant a good portion of this corn at all events, for under any circumstances it will do as well as the common corn, and it affords the best chance of escaping from the droughts.

G. B. S.

Beet Sugar in Michigan.—The Legislature of Michigan at its last session passed a law offering a liberal bounty on all beet sugar raised in the State, and incorporated a large company at White Pigeon for the manufacture. The Agent of this company has recently been despatched to Pittsburg and Philadelphia, with instructions to purchase a hydraulic press, and the necessary apparatus and chemicals used in the manufacture of sugar. This beet crop in that region is said to be in excellent condition, promising a great yield, and the success of the enterprise believed to be no longer doubtful.

The weasel is committing ravages in the wheat in the north of this State near Malone. We notice the following remedy:

Mr. Barney Baker, one of the superintendents of the rail road, residing at St. Johnsville, informs that he has preserved a hundred bushels of sowing this season, by a hundred pounds of brim-

stone, whilst his neighbors wheat has been entirely destroyed. He expresses the most perfect confidence in the remedy.—*Amsterdam Intelligencer*.

From the Genesee Farmer.

HARVEST DRINKS.

The bounties of a kind Providence have been showered upon us with a liberal hand; the fields are rapidly becoming 'white to the harvest;' the weather is and has been most intensely warm; a vast amount of labor must be performed under a burning sun to secure the crops; and the question may be asked, what, under such circumstances, shall be the harvest drink of the husbandman? Not ardent spirits of any kind; nothing that can destroy both soul and body, we hope will be the prompt response of every farmer in the country. To repeat that the severest labor of the harvest, in the hottest weather, can be better performed without ardent spirit, than with it, is to repeat a mere truism, for thanks to the good sense of the farming community, there is scarce a neighborhood that does not furnish abundance of examples in proof. Spirits then are not, as was once supposed, necessary to the performance of severe labor, and their use ought not to be tolerated only to please a vicious and depraved appetite. Good beer, home brewed, with molasses, ginger, and hops, forms a pleasant drink and one which most people like. Simple molasses and water, with just acid enough in it to be pleasant, is an excellent drink, and one that assuages thirst in a greater degree than most others. Some add to a pitcher of this drink a spoonful of ginger; and where considerable water is drank something of the kind may be beneficial. Milk and water makes a healthy drink, but vessels containing it, are, in very hot weather, with difficulty kept sweet. Some have recommended the Scotch drink, viz. a little oatmeal stirred into the water immediately before drinking; and Judge Buel pronounces it one of the best beverages. Very cold water must be guarded against by wetting the face and hands before drinking, washing or rinsing the mouth before swallowing, and not taking it in large quantities, while the body is warm.

An excellent pickle for butter.—1 pail of water, 2 qts. fine salt, $\frac{1}{4}$ lb. loaf sugar, 2 oz. saltpetre, well boiled and skimmed. Cover the butter entirely with this pickle, and it will keep sweet the year round.

Locked Jaw.—A remedy has been discovered for this dreadful affection. It is nothing but the application of strong ley made from wood ashes. The part injured should be bathed in ley frequently, and if it be in a part of the body that cannot be conveniently immersed, apply flannels wetted with the ley. It affords speedy relief and gradual cure. This is a simple remedy, but it is worth remembering and trying. The simplest are often the most efficient agents. Many cures are said to have been wrought by this.—*Southern Churchman*.

It is estimated there is \$400,000,000 specie in France; \$150,000,000 in England, and about 80,000,000 in the United States.

To the Executive Committee of the Hampshire, Hamden and Franklin (Mass.) Agricultural Society:

GENTLEMEN,—Agreeably to your request, I submit a more particular statement of the process and result of reclaiming the land on which your premium "on reclaimed land" was last given.

The ground in question was a strip of low land, or succession of wet hollows with several branches, varying in width from two to ten rods, and containing altogether, including the adjoining banks, about five acres. Its former produce was brush, brakes, weeds, and swamp hay, mostly sedge. Of the latter, it had given perhaps three or four loads yearly, which was worth but little more than the expense of harvesting. In August, 1834, the bushes and brakes, which grew mostly on the banks or borders of the wet land, were cleared off and the whole ground, was ploughed—a ditch having previously been cut along the foot of an adjoining side-hill, to intercept and take off several springs that were adding largely to the amount of water in the low ground, which from other sources was so abundant in many places as to destroy useful vegetation. A free course for the water through the lower part of the ground was obtained by turning a few furrows each way from the centre or lowest part, and running the plough once or twice through after the sod was turned, and shovelling out the loose earth that fell in behind the plough. The same method was adopted to make drains on the outsides of the low land, as near the foot of the winding banks as the furrows could be turned, to cut off the small oozing springs which were constantly sending their waters over its surface. These water-furrows or ditches led into, and were finished in the same manner as the ditch in the centre. This arrangement at the commencement of the ploughing gave a dry surface during the further operations, and admitted the sideling banks to be conveniently turned down the hill in ploughing, without impeding the course of the water, and saved considerable expense of hand labor in ditching.

When ploughing, especial care was taken that the whole surface should be turned over with a good even furrow so as entirely to cover in and smother the worthless herbage; and where it could be done without bringing up the cold sub-soil, it was turned from five to eight inches deep. To perform the operation thoroughly and make smooth work, one and sometimes two men with hooks or hoes, to follow the ploughman and remove roots, stumps or old logs drawn out, or arrange broken or misplaced furrowslices, were necessary. A plough of larger than ordinary size, and constructed expressly for the purpose, was used, with a knife attached, sharp and strong enough to hold two yoke of oxen at a stump or root—and to this instrument, with few exceptions, green roots not exceeding one and a half or two inches in diameter, presented no serious obstacle; and brake bogs, commonly called 'nigger heads,' were cut through and laid over as handsomely as one could wish, presenting a surface of soft mould sufficiently deep to give a good finish, and better adapted to the reception of grass seed than the same ground could have been by the extra number of ploughings and cross-ploughings, and quantum of harrowing and dragging, and upsetting and rolling of sods in a three years

course, that is frequently thought necessary to bring land of this description into order.

After ploughing, the ground was rolled and harrowed fine, and sown with clover, herdsgrass and red top seed, and finished by again rolling. No manure was put on, although a part of the ground would have been benefited by its application. Much the largest portion of it, from four or five inches to two feet deep, slightly intermixed with sand washed in from the adjoining high ground, and well decomposed—the fertility of which would have been but little increased by the addition of barnyard manure. All that seemed necessary to insure good crops of grass on this part was to lay the ground dry, extirpate the old occupants of the soil, and expose to the light a clean surface well stocked with young plants of the cultivated grasses. In one place of a few square rods the stratum of black mould was only about two inches deep, resting on a light bluish clayey subsoil, of which it was thought necessary to turn up an inch or two when ploughing, in order to effectually destroy the short sedge grass with which this spot was covered. On this the grass seed did not vegetate except where it fell between the furrow-slices and had an opportunity of striking root in the black mould beneath; and the next season it presented regular rows of grass, with spaces of bare ground about a foot wide between, which have since been gradually yielding to the influence of sun and atmosphere, until the whole is covered with grass of good quality;—and the crops, though light, are much more valuable than formerly. On this spot, manure, or compost, or even good soil, could have been applied at the time of sowing the grass seed with undoubted advantage.

Estimating the labor of a man at one dollar per day, and the same price for a pair of cattle, the whole expense of the labor was about fifty dollars, or ten dollars per acre. And very large proportion of this expense was for breaking down and smoothing the rough, and, in many places, precipitous, banks which were filled with roots, altogether rendering the process slow and tedious. In 1835, the product (without weighing) was thought to be something less than one ton per acre of good hay. In 1836, the grass was about equal proportions of the kinds sown, and lodged on some of the lowest ground for one or two weeks before cutting. The average product was estimated to be two tons per acre of first quality of hay, and the value of the crop standing was at least equal to the whole expense of the improvement. In 1837, the crop was fair, but not as good as that of the preceding year, on account of accidental stoppages of water in some of the furrow-drains, which were not seasonably cleared out,—not being fully aware of the mischievous tendency of stagnant water, so soon to weaken the cultivated grasses, and animate their seeds and wake to new life the old settlers, whose repose it was important should remain unbroken and perpetual, unless the good qualities of polypode and bulrushes become better appreciated. The effects of the casualty are seen the present season in the various aquatic plants and grasses, mingled more or less with an otherwise good crop of grass: evincing that the ground will require a second ploughing much sooner than would otherwise have been necessary. The expense of ploughing, however,

when it does become expedient, will probably not exceed one quarter of the expense of the first operation.

There is undoubtedly within the limits of the society, hundreds of acres—(indeed, there are few farms that have not more or less)—of land that continue to produce light crops of almost worthless hay,—which, simply by draining over, (nearly all of which may be done with a suitable plough,) with a liberal allowance of grass seed, would give large crops of good hay for a series of years, with no other expense than keeping the water courses clear and harvesting. I refer to gently sloping or nearly level wet lands, where there is a good depth of well decomposed vegetable matter sufficiently intermixed with sand to resist excessive moisture or drought.

The first great requisite in improving wet lands, is undoubtedly draining, as none of our valuable cultivated grasses can exist in ground where water, for a very considerable part of the season, stands on or near the surface. If this fact is lost sight of, ploughing or manuring or any other or all other measures will be of no avail.

Respectfully your ob't servant

WILLIAM CLARK, Jr.

Northampton, July 30, 1838.

From the Genesee Farmer.

PREVENTION BETTER THAN CURE.

When we consider the time required to renovate and render productive, land once exhausted by continual and improper cultivation, and the expense and difficulty of the operation; it seems clear that the wisest course for the farmer would be, to adopt a system that would keep his land in good heart, and prevent exhaustion, and the consequent necessity of renovation. This can be done without difficulty, if the farmer commences aright.

By the rotation of crops, by using root crops with grain crops, by alternating green crops with white ones, there is abundant evidence that a farm can be kept in a productive state, and instead of exhaustion, be growing more rich and fertile.—Continual cropping will destroy the best soils. There must be change or rest; it is preposterous to talk of not understanding the reason of land growing poorer, while the suicidal course adopted by many of our farmers is persisted in.

The intervention of a growth of clover for a single year between wheat crops, though far preferable to the system of wheat after wheat, will not prevent this wearing out of the farm, or a field becoming tired of any particular crop. There must be a succession of plants that draw their nourishment from greater or lesser depths of the soil; as the tap-rooted after the fibrous; or plants that require from the earth different materials as food, such as the leguminous followed by the farinaceous. Clover is perhaps one of the best renovators of the soil; and plastered and ploughed in as a green dressing, it is one of the most valuable kinds of manure that can be applied.—Some experiments shown that of well seeded clover of 2 years growth, the roots alone will weigh from nine to twelve tons to the acre, thus fully establishing its value, and the manner in which this plant enriches the soil. Farms properly treated from the first will never wear out,

but their productive capacities will increase rather than diminish.

Those, therefore, who have farms which have not suffered from the evils of a course of cropping that has rendered much of the soil of the old settled states comparatively sterile, should be wise in time. The haste to be rich, which has led many of the farmers of Western New York, and other parts of the grain growing states, to grow a succession of white crops on the same field should be abandoned for a more rational course of proceeding; one which combines profits with permanent fertility, and shuns alike the old fashioned notion that grass land should never be ploughed, or the modern injurious practice that condemns our fields to the plough without intermission.

From the Yankee Farmer.

CLOVER AND TILLAGE.

DEAR SIR—I am induced to send you the following article on clover and tillage, selected from an old agricultural publication, because I believe the rules therein laid down are right. I have practiced upon them for 10 years, and therefore can speak from experience. I would earnestly recommend every farmer to follow the same plan.

"Never cut your clover the first season, nor feed it too close, both are injury to it, but the second season cut your clover when in full bloom, when not more than one fourth of the heads begin to turn brown, which will generally be in the month of June. The cutting and curing of clover is very nice and critical farming, and demands the first attention. The heads and leaves of clover are its principal value, the stalk when coarse, is of little use, therefore, in order to preserve the most valuable parts, cut your clover in dry weather, and when the dew is dried off from the first swaths, turn them over gently, without spreading, until you come to the swaths, which are free from dew; let those lie untouched until noon, unless showers, or a storm become threatening; in this case, break off your mowers, and get your clover from the swath into small cocks. Let the cocks be made with the fork, with only once or twice rolling, but if the weather continues fair, let your mowers keep on and your haymakers follow with their forks, and put all the swaths into small cocks. The next day let these cocks stand, and go on cutting as before; proceed thus until you have secured your clover. In two, three, or four days as the weather may be, the clover first cut will be fit to cart, if the weather proves fair, if not, the rains will never penetrate farther than the winds and sun will dry, the clover will be injured only upon the surface. Should a long cloudy, or moist turn of weather succeed, you may give your clover air, by taking off the top of each cock and placing it for the bottom, and thus with your fork change the order of your cocks by bringing the bottoms to the top; this mode will cause your cocks to shed rain better than the common mode of turning them over at once with the fork. When you find your clover sufficiently cured for housing, taking the first good hay-day, turn over your cocks in the morning when the dew is off, and as soon as the moisture is dried from the bottoms, clear your field as fast as possible; thus you will secure all the valuable parts of your clover, viz: the heads and leaves, in full blossom, and as perfect a green as when growing; and your horses will hold their flesh and

do more service on this clover, without grain, than on clover cured in the common method with the usual quantity of grain, and you will readily experience the saving in expense, which although of importance, will be found to be of minor consideration in this mode of husbandry.*"

No two things differ much more than hurry and despatch. Hurry is the mark of a weak mind, despatch of a strong one. A weak man in office, like a squirrel in a cage, is labouring eternally, but to no purpose, and in constant motion, without getting on a jot; like a turnstile, he is in every body's way, but stops nobody; he talks a great deal, but says a very little; looks into every thing, but sees into nothing; and has a hundred irons in the fire, but very few of them are hot, and with those few that are, he often burns his fingers.

*If you sow your clover thin, with only 2 or 3 quarts of seed to the acre, (as is the practice of some,) it will be of an inferior quality; the stalk will grow large and rank; and require more attention in curing; therefore never sow less than 5 or 6 quarts to the acre. Whenever your clover has sweat and cured in the cock, so that you can select the largest stalks, and twist them like a string, without their emitting any moisture upon the surface, when twisted, you may then house your clover; it is in its most perfect state. If you sow timothy, or herds grass with your clover, you may manage in this way, for the first year, with safety—the second year it will become about one-half timothy, or herds-grass, and must be spread and turned gently, to preserve as much as possible the heads and leaves of your clover: the third year, your clover will disappear, and the herds-grass must be spread and cured in the common mode; I say the common mode, for I presume that every farmer spreads his hay into 3 swath winrows, (unless it be heavy English grass, of 2 or 3 tons to the acre, which will occupy all the surface of the field on which it grew, to cure it;) this saves the expense and trouble of one raking, and that he spreads in the forenoon all the swaths cut before 12 o'clock, (leaving the swaths cut after 12 o'clock, to continue in the swath until the dew is off the next morning,) and that he gets into cocks before 5 or 6 o'clock in the afternoon, all the hay spread upon his field. The fermentation which hay undergoes by standing in the cock over night, not only sweetens the hay, but prepares it for a more rapid evaporation of its juices the next day, and will doubly pay the expense of cocking, besides the security it affords against bad weather.

From the Georgia Constitutionalist.

ESSAY,

Read July 14th, 1838, before the "Agricultural Society of Richmond County," and published at their request, by Dr. J. G. M'WHORTER.

Extract from the minutes.

On motion of Judge SCHLEY, Resolved, That the thanks of the society be presented to Dr. McWhorter, for his scientific and practical communication upon the subject of sowing Small Grain, and that a copy be requested for publication in the papers of Augusta.

It is believed that great improvements may be

made in our agricultural operations, not excepting our two most perfect cultivations, Cotton and Rice, which are supposed to have reached the *ne plus ultra* of improvement. We at the south are greatly behind the age in every thing relating to the cultivation of the earth, the great employment which supports the human race, and indirectly the mass of animal existence. So important an employment of man deserves his serious attention, and should engage his best exertions for its improvement.—To contribute our mite to this great object was the motive which led to the formation of the *Agricultural Society of Richmond County*; and no citizen who has witnessed or can conceive the different aspects of a well cultivated and a neglected country, could hesitate to assist in extending a more general knowledge of the principles of agriculture and its improved operations. With that view, the writer has hastily, (in the absence of a regular report from the *Board of Agriculture*,) drawn up this paper, not with the expectation of imparting any thing new, but with the hope of calling greater attention to the best mode of putting into the earth, wheat, oats, and grain of all kinds, and the principles which demand and justify it.

These three maxims hold universally true in agricultural operations:

1st. What is worth doing at all, is worth doing well.

2d. The best ploughing a crop gets, is that which it receives before it is planted. And,

3d. A crop well put in, is half made.

As a universal rule, the first thing to be done, allowing the ground to be fertile enough, is to break it up well, having it soft and pulverized to a depth proportioned to the depth of the soil. The next thing is the proper disposition and inhumation of the seed. With regard to the preparation of the soil, as it is believed all understand the necessary operations, I shall say nothing, but confine my remarks to the disposition and inhumation of the seed, and the reasons for such directions as shall be given in regard to these operations.

The ground should be harrowed and levelled, and the surface pulverized to the depth of at least two or three inches, before sowing the seed, which will then lie more evenly and regularly distributed, without falling in masses into open furrows and indentations in the surface, thus throwing too many seeds in one spot, while other places have none at all, or not their proper proportion. The seed sown should then be covered by the harrow alone, and the levelling process previously executed will prevent the harrow from throwing the seeds from a ridge, on which they might lodge, into the adjoining hollow, where they will be too thick to be productive of abundant heads. If from the great inequality of the surface, an equal distribution of the seed is supposed not to have been effected, the harrowing should be repeated in the opposite direction; indeed, this cross harrowing it would be well to repeat in all cases, so that if the harrow teeth are not too far apart, the seed will be placed in relation to each other at such distances, as, by a proper distribution, will ensure a full occupation of all the land, without those inequalities, which are otherwise almost inevitable, and which by crowding particular spots allow the farmer but a moderate return of straw without grain.

These remarks, it is hoped, are so far intelligible. They are designed to show, that it is important to procure an equal distribution of seed over the land, which cannot be done, if sown on an unlevelled surface, and without double harrowing to separate the seeds which have fallen too many in one place, and into the furrows made by the teeth of the harrow in the first operation of covering. This second operation, if the harrow has teeth not too far from each other, cuts the field in small squares, each of which has its proportion of seed, without any part having thrown on it more than it is able to nourish.

The next direction in the process, and on which the principal improvement depends, is to *cover the seed shallow*, which cannot be done with the plough. The plough besides, throws the seed into furrows, and although most of the seed fall only half the depth of the furrow, yet many reach the bottom and are thus covered so deep, that they either never come up, or reach the surface at so late a period, that its pasturage is already occupied by more thrifty competitors. Thus there is a waste of seed, and the production of weaker plants, which either pize till they die, or lead a sickly existence, entirely without fruit or with an imperfect product. What more could be rationally expected from the too common way of putting in the oats crop? The owner scatters in the fall or spring, his seed over the unploughed surface of some fallow field, beat hard by the year's rain and the feet of his cattle, and finishes the slovenly process by once ploughing it, leaving it uneven and cloddy, and the seed covered by long slices of the tough surface, through which it will be very difficult to penetrate.

The direction to *cover shallow* is indefinite. It should be more explicit, and for this purpose an inch may be indicated as about the proper depth. This is the rule of Nature, but she is so abundant in the production of seeds, and intends in her beneficence so many of them for the consumption of her creatures, that loss of seed is thus part of her maternal intention, and an immense proportion is, therefore, never covered by the earth for re-production. These are either consumed by animals, or, exposed to the sun's heat without sufficient moisture, decay and are lost to the reproductive process. Those, however, which are more fortunate, and are covered by the animal foot, rain, or any other accident, strike their roots near the surface, and there alone enjoy the benefits of moisture, air, solar heat, and light, which are all essential to their healthful and productive existence. Now what are the facts in this regard?

If you examine the roots of any of the grains mentioned, you will find that those plants are the most thrifty, whose germination took place near the surface of the soil, while the weakly-looking plants have sprung from a depth of three or four inches. The latter continue weakly, branching little or none, while the former throw out additional shoots from the root, and multiply the production more than an hundred fold. The deeply covered seeds are eight or ten days later in appearing, and their further growth is delayed, not simply by the existence of stronger rivals for the pasturage, but they stop when they approximate the surface to take that start which Nature intended for them at first. Within an inch of the surface they shoot forth new roots, and all below, down

to the seed, shrivels and dies, so that the future plant depends alone for nourishment on those sets of organs, which it has developed in proximity with the surface, where it can receive the direct influence of these essential agents, moisture, air, heat, and light. This process still farther delays its taking a vigorous stand among its more fortunate competitors, who were from the first placed more within the reach of those salutary agencies. But many of these deeply-covered seed are never able to send their shoots to the surface at all—they perish below. And why? Because Nature having allowed only a certain quantity of nourishment for the embryo, *that is exhausted* before its stalk reaches the surface, where its leaves derive a new and additional nutriment from the atmosphere. The roots only form near the surface, that are to give permanent nourishment to the future plant, so that as they are not formed, the plant cannot yet be nourished by their activity in the soil. The nourishment, then, intended for the germination of the leaf and the first roots, being exhausted before the young plant can reach its store-house above the surface, it must necessarily perish for want of sustenance, and thus disappoints the hopes of the husbandman.

I wish to be understood. When you plant your corn, potatoes, &c., you do not imagine the whole mass of seed, the whole potatoe or grain of corn, constitutes the embryo of the future plant. No, the living point which contains the rudiments of the future plant, is very small generally speaking, a mere *point*, and the mass of substance in which it is embedded is the nourishment which provident Nature has stored up for its support, before it is able to seek its stores in earth and air. The yolk of the egg is a similar provision for the chicken before it is hatched, and for the short period of helplessness, which succeeds its birth.—While the little prisoner is exhausting this store, its wants and instincts urge it to seek that liberty, the desire of which is *not born with us*, nor confined to animal existence alone, but urges even the vegetable creation before its struggling embryos have assumed their forms of beauty in the outer world.

There is another reason, why many deeply covered seeds perish. Moisture and warmth produce in the germinating seed a fermentative process, which evolves carbon in quantities sufficient to overpower the germinating energy, if the quantity is not lessened by combination with the oxygen derived from the atmosphere. If the seed, then, is buried too deep for the influence of the atmosphere on the chemical process going on in germination, the embryo is dissolved and destroyed, and the husbandman disappointed in his hopes. The carbon thus formed, however necessary that article may be to the future growth of the plant, would be fatal to the germ, if its superabundance were not combined with the oxygen of the atmosphere. This combination yields the carbonic acid gas, delivered in the germination—the very same gas which bubbles up through the beer tubs of the distillery, and derived in the same way from the fermentation of the farinaceous matter of the seeds used in such establishments. The oxygen gas of the atmosphere is moreover essential even to this fermentation; for seeds planted so deep, as to be beyond its reach, will lie dormant for years, if kept dry, but still capable of continuing the species on the accession of heat, moisture, and air.—

This seclusion of the air is the reason why seeds come up so badly, if, after sowing, the surface of the earth becomes muddy after a heavy rain, and hardened into a close crust.

With regard to other matters connected with this subject, time of sowing, our time will compel brevity. We think all small grain should be sown the first or second week of October. Local situations will, of course, modify all general rules. For instance, in situations subject to a superabundance of moisture, the plants would be liable to be frozen—a result the more probable from the spewing up of the earth by the frost, and thus more exposing their roots to the severity of the winter. But when the crop thus early sown escapes injury, its product is much more heavy and perfect; and it furnishes the farmer an earlier supply by a month, at a season, when his stores have diminished to a scanty supply. Our wheat should never be sown later than the middle of October. It would be better if sown the middle of September, and then its risks are nearly reduced to one, the danger of a late frost in the spring.* It would ripen before those diseases occur, which are aggravated, if not produced, by those moist hot periods so common to our vernal season. All the successful producers of wheat, those, who, in the language of their neighborhood, *never failed*, it will be found on enquiry, have invariably in every instance, sown their seed from the middle of September to the middle of October, according to seasons. Wheat should not be sown on a fresh manured field; it is a plant of delicate taste and suffers from gross living. But after other plants, corn for instance, have fed on the manure, and used its gross parts, then wheat may be grown advantageously, without the risk, which a soil, rank with animal substances used for manure, invariably incurs in this crop. Rust and blasted heads are almost uniformly the consequence, particularly if the last of April and May are hot and wet.

*There were two heavy frosts on 13th and 20th April this year, which killed down to the earth the early corn, but which appeared to have no effect on the wheat. One portion of my wheat crop was sown on the 17th September, and the other on 8th November. The former had not a particle of rust on its straw, which was bright, and healthy to perfect maturity—the latter was slightly touched, but at a period too late to affect it much.

From the Genesee Farmer.

OLD AND NEW HUSBANDRY.

These terms are frequently made use of in the journals of the day, and that their propriety may be fully understood, a little explanation may be necessary. Any one who recollects what the system of farming was, in most cases, some thirty or forty years since, cannot be at a loss to understand what is meant by the old system. The fields kept under the plough until fertility was so reduced, as to not pay the expense of cultivation, and the meadow and the grass lands left undisturbed by the plough till the valuable grasses had been crowded out, and those left only fit to starve cattle upon, explain what is understood by the Old Husbandry. The system of rotation in the cultivation of fields and crops, subjecting each alternately to the action of the plough, and by this method, giving each an opportunity to recruit; the grow-

ing of roots for feeding cattle instead of relying entirely upon hay or grasses; and the increased application of manures constitute the leading features of what is called the New Husbandry.

After a great variety of experiments, made with the greatest skill and care for several years, Von Thear, one of the most unexceptionable authorities, gives the product of a certain farm under the old system at \$8000; while the same number of acres under the rotation system gave an annual produce of \$8,300, or rather more than double.—It seems somewhat like an agricultural paradox, to assert that any given quantity of land will produce more grain, with cattle than without cattle. But the reason is found in the simple axiom—without cattle no manure; without manure, no grain. "Fifty acres of land well cultivated and dunged, will produce more grain than 100 without manure, or 75 half manured; not only more, but *very much* more, *twice* as much, in ordinary cases." (Curran.) By the best course of rotation, part of the land that was formerly in grain is devoted to roots, such as the turnip, carrot or potatoe, and the greater quantity of food produced in this way enables a farmer to materially increase his stock, and consequently adds to the means of fertilizing his land to a greater degree.

The course of rotation that has been highly recommended, both in Europe and in this country, as the best for both grain and cattle, is roots highly manured; barley or clover; clover put in with the foregoing; wheat after clover. In this system of husbandry; or any similar one, the grand objects of keeping cattle and sheep with raising grain, are combined, and made mutually to advance each other. On the old plan they were of necessity mostly kept distinct, and stock farms and grain farms were terms then made use of with much more propriety than in any well cultivated district at the present day.

ON FEEDING WET LEAVES TO SILK-WORMS.

Mr. George Fitch, of Bridgton, made an experiment last season, on feeding silk worms on wet leaves. A few days after they were hatched he divided the worms into two lots; one lot was fed on dry or wet leaves as they happened to be, according to the weather; and when leaves were dirty they were washed and given to the worms; this lot grew faster, and became larger, and spun a week sooner than those fed on dry leaves. It required 40 threads, before doubled, from the cocoons of those fed on dry leaves, to make a thread of sewing silk of rather a large size; it took eighty threads of those fed on wet leaves make a thread about the same size. The cocoons from wet leaves were the largest and heaviest; some of them had threads 800 yards in length. The length of the threads from the cocoons of the silk worms fed on dry leaves was not measured.

We publish these particulars as it has been considered necessary to have dry leaves for silk worms, and it has been recommended to pick leaves before a storm in order to have a supply of dry leaves on hand. A few years ago, there seemed to be, according to writers on the subject, a great deal of difficulty in managing silk worms and manufacturing silk. Close rooms, with stoves and thermometers to regulate the temperature, and dry leaves were considered indispensable; and

several years practice, with good and *costly* instruction, and an expensive reel, in order to prepare the silk for sale in a raw state. Now, silk worms are kept in barns or sheds, without any artificial heat, and they suffer no more from cold than they do from heat. So much nicety as has been practised in regard to their feed is not necessary.—*Yankee Farmer.*

From the Germantown Telegraph.

THE BLACKBIRD A NON-DEPREDATOR.

As the attention of the public and particularly of farmers, is being awakened in regard to birds and their value in protecting our orchards and destroying noxious and destructive worms and insects, the BLACKBIRD, I respectfully submit, deserves honorable notice and protection. This bird has long borne a large part of the censure so richly deserved by the crow; and the depredations of the latter upon our corn fields I am persuaded has been unjustly placed to the account of the former. As I have a number of high trees about my domicile, many pairs of Blackbirds annually build their nests in them. For about two years after I commenced farming, I had these birds destroyed under an apprehension that my corn-fields would be injured by them. I found, however, that in ridding myself of these, other birds, beautiful in plumage and charming in song, became alarmed at the sound of the gun and shunned my enclosures. I resolved to bear with the depredations of the sable wrong-doers rather than deprive myself of the luxury of my musical companions. The following spring the gun was laid by, and a few blackbirds ventured again to throw themselves upon my hospitality.

During the following season I observed them constantly in the furrow, and as I had inculcated the doctrine of peace and kindness among my people, the birds became so tame as to show that they confided in the friendship thus extended toward them. At length the corn came up and I saw them for several days busily engaged in visiting it and returning to their nests. My good feeling toward them began to waver; and I had almost determined on a renewal of hostilities, when I observed a bird having in his bill what I took to be a grub worm. Well done, said I; for I considered this in the light of a flag of truce, and it to be a proffer of negotiation—a plea of not guilty and a challenge to put me to my proof in regard to the injury to the young corn. I then took a station as any liberal and just man should have done, when I soon saw a Black bird alight upon the field, and after having performed various hops, much upon the Jim Crow principle, he struck his bill into the ground, pulled something up and away he flew to his nest. I carefully marked the spot and proceeded forthwith to examine it. Upon the way I upbraided myself for my folly in allowing these vile birds to destroy my corn fields which I had taken so much pains and been at such expense to cultivate, when I had the experience of every body as to the destructive propensities of these depredators. Another bird or perhaps the same, came gayly from his nest and alighted near me. I considered this an insult direct, as if he had come there to do me wrong before my face, and to upbraid me for my folly in submitting to it. I arrived at the marked spot, but imagine my surprise at finding no corn uprooted nor any evidence

that such a thing had been done. I then watched the fellow who had come to mock me as I had imagined, and found I had also been mistaken in regard to his errand. I saw him soon pick up a grub and fly away with it to his nest.

Since then my flock of Blackbirds has considerably increased, for I believe those that escape the idle sportsman annually return. I welcome them as well as the blue-bird when they first visit me in the spring, as the harbinger of that delightful season. They remind me that nature is about again to unfold her blossoms, and cheer and comfort man with her manifold bounties; that the leafless branch is again to burst into life; that our fields are soon to teem with plenty, and our hearts are to be gladdened with the renovated luxuriance of summer.

But to return to my subject. I have never since been able to discover that these birds have done my corn the slightest injury, although I have frequently marked the spots from which they have flown and examined them, and been convinced that they feed upon the grub and other worms; and that to have them to frequent our corn and other fields, is attended not with injury but with great advantage to our crops. Let those who have doubts upon this subject, watch them, and if they do not catch them in the act, charge the corn uprooted to the account of that villain the crow, who is guilty of not only this outrage, but stealing eggs and destroying young turkeys and other poultry whenever he has an opportunity. If the Blackbird is not guilty, I ask you, farmers, in mercy and for your own interest, not only to spare but to protect him.

K.

NEW SEED STORE.

The subscriber has just received a FRESH SUPPLY OF GRASS SEEDS, warranted to be genuine and fresh, suitable to the approaching season, such as

Timothy

Orchard

Herds or Red Top

Also, BUCKWHEAT for fall seeding, as an inlay, preparatory to the wheat crop.

TURNIP SEEDS, of different kinds and of the best quality. Farmers and Gardeners will find it to their advantage to call and supply themselves liberally of this seed, to supersede in some measure their loss occasioned by the drought. Also BIRD SEED of every kind.

All orders by mail or otherwise, for CASH or good REFERENCES, will be faithfully and duly executed, with despatch. FARM AND GARDEN TOOLS of all kinds on best terms, furnished by THOMAS DENNY, at 21 4t Grant street, near Pratt street.

TURNIP SEEDS.

5000 lbs. Turnip Seeds of first quality of the following kinds, will be supplied at the very lowest wholesale rates; which will enable venders to make large profits in selling by the pound, and far larger when selling in smaller parcels.

Purple topped Ruta bagea or Yellow Swedish Turnip, White flat Field, White Norfolk, Early White Dutch, Yellow Dutch, Yellow Flat Field, Yellow Aberdeen, Large Yellow Bullock, Long Tankard, Yellow Stone, White Stone, Yellow Maltese, Dale's New Yellow Hybrid, Swan's Egg, Red top or Red Round, Green top or Green Round, and others.

Also, for sale, every other kind of Garden, Flower and Agricultural seeds. A liberal credit to venders—and priced catalogues will be sent to all who desire.

N. B. 600,000 Chinese Morus Multicaulis Trees, 3 to 6 feet high, deliverable in October—and 200,000 Morus Expansa, Brussa, and other choice varieties.

WM. PRINCE & SONS,
Flushing, New-York.

july 17

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BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every Monday

	PER	FROM	TO
BEANS, white field,	bushel.	1 25	
CATTLE, on the hoof,	100lbs	6 00	7 50
CORN, yellow	bushel	90	91
White	"	90	91
COTTON, Virginia,	pound	9	11
North Carolina,	"	9 1/2	11
Upland,	"	9 1/2	11
Louisiana—Alabama	"	11 1/2	12
FEATHERS,	pound.	45	50
FLAXSEED,	bushel.	1 12	
FLOUR & MEAL—Best wh. wh't fam.	barrel.	—	—
Do. do. baker's	"	—	—
Superior, st. from stores	"	7 12	7 25
" wagon price,	"	6 75	
City Mills, super.	"	—	7 37
" extra	"	7 75	
Susquehanna,	"	—	—
Rye,	"	4 25	
Kiln-dried Meal, in hhds.	hhd.	—	—
do. in bbls.	bbl.	—	—
GRASS SEEDS, wholes. red Clover,	bushel.	—	—
Kentucky blue	"	2 50	3 00
Timothy (herds of the north)	"	2 25	2 50
Orchard,	"	2 00	2 50
Tall meadow Oat,	"	—	3 00
Herds, or red top,	"	90	1 00
HAY, in bulk,	ton.	12 00	16 00
HEMP, country, dew rotted,	pound.	6	7
" water rotted,	"	7	
HOGS, on the hoof,	100lb.	6 75	7 00
Slaughtered,	"	—	—
HOPS—first sort,	pound.	9	
second,	"	7	
refuse,	"	5	
LIME,	bushel.	32	33
MUSTARD SEED, Domestic, —; blk.	"	3 50	4 00
OATS,	"	—	36
PEAS, red eye,	bushel.	—	1 12
Black eye,	"	1 00	1 12
Lady,	"	—	—
PLASTER PARIS, in the stone, cargo,	ton.	3 50	3 75
Ground,	barrel.	1 50	
PALMA CHRISTA BEAN,	bushel.	—	—
RAGS,	pound.	3	4
RYE,	bushel.	80	
Susquehanna,	"	—	none
TOBACCO, crop, common,	100lbs	4 00	4 50
" brown and red,	"	4 00	6 00
" fine red,	"	5 00	8 00
" wrappery, suitable	"	—	—
" for segars,	"	10 00	20 00
" yellow and red,	"	8 00	10 00
" good yellow,	"	8 00	12 00
" fine yellow,	"	12 00	16 00
Seconds, as in quality,	"	—	—
" ground leaf,	"	—	—
Virginia,	"	4 50	6 00
Rappahannock,	"	—	—
Kentucky,	"	5 00	8 00
WHEAT, white,	bushel.	1 60	1 62
Red, best	"	1 50	1 55
Maryland	"	1 40	1 50
WHISKEY, 1st pf. in bbls.	gallon.	38	
" in hhds.	"	—	—
" wagon price,	"	—	—
WAGON FREIGHTS, to Pittsburgh,	100lbs	2 25	
To Wheeling,	"	2 50	
WOOL, Prime & Saxon Fleeces,	pound.	40 to 50	20 22
Full Merino,	"	35 40	18 20
Three fourths Merino,	"	30 35	18 20
One half	"	25 30	18 20
Common & one fourth Meri.	"	25 30	18 20
Pulled,	"	28 30	18 20

A SETTER DOG.

FOR SALE—A Setter Dog of handsome appearance, 15 months old, thorough-bred and well broken for his age. He ranges finely and is staunch on the set. His price \$30.

Applications for him to be made to the editor of this paper—all letters to be post paid. aug 14

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,	barrel.	—	—
BACON, hams, new, Balt. cured,	pound.	14	15
Shoulders, do.	"	10 1/2	11 1/2
Middlings, do.	"	—	11
Assorted, country,	"	10 1/2	11
BUTTER, printed, in lbs. & half lbs.	"	25	31
Roll,	"	—	—
CIDER,	barrel.	—	—
CALVES, three to six weeks old,	each.	5 00	6 00
Cows, new milch,	"	25 00	40 00
Dry,	"	12 00	15 00
CORN MEAL, for family use,	100lbs.	1 62	
CHOP RYE,	"	1 75	
EGGS,	dozen.	12 1/2	
FISH, Shad, No. 1, Susquehanna,	barrel.	9 75	10 00
No. 2,	"	9 50	
Herrings, salted, No. 1,	"	4 50	4 62
Mackerel, No. 1, ———— No. 2	"	—	—
No. 3,	"	—	—
Cod, salted,	cwt.	3 25	3 37
LARD,	pound.	—	11

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

U. S. Bank,	par	
Branch at Baltimore, do		
Other Branches, do		
MARYLAND.		
Banks in Baltimore, par		
Hagerstown, do		
Frederick, do		
Westminster, do		
Farmers' Bank of Mary'd, do		
Do. payable at Easton, do		
Salisbury, 1 per ct. dis.		
Cumberland, par		
Millington, do		
DISTRICT.		
Washington, do		
Georgetown, do		
Alexandria, do		
PENNSYLVANIA.		
Philadelphia, par		
Chambersburg, do		
Gettysburg, do		
Pittsburg, do		
York, do		
Other Pennsylvania Bks. do		
Delaware [under \$5] do		
Do. [over \$5] do		
Michigan Banks, do		
Canadian do. do		
VIRGINIA.		
Farmers Bank of Virgi. do		
Bank of Virginia, do		
Branch at Fredericksburg, do		
Petersburg, do		
Norfolk, do		
Winchester, do		
Lynchburg, do		
Danville, do		
Bank of Valley, Winch. par		
Branch at Romney, par		
Do. Charlestown, par		
Do. Leesburg, do		
Wheeling Banks, do		
Ohio Banks, generally do		
New Jersey Banks gen. do		
New York City, par		
New York State, do		
Massachusetts, do		
Connecticut, do		
New Hampshire, do		
Maine, do		
Rhode Island, do		
North Carolina, do		
South Carolina, do		
Georgia, do		
New Orleans, do		

TO THE PUBLIC.

Try the New Agricultural Establishment in Grant-street, next door to Dinsmore and Kyle.

Every article warranted to be first rate. The subscribers, grateful for past favors, take this early opportunity of returning their thanks to their customers and the public in general, and beg leave to inform them that they are now provided with a very extensive stock of newly manufactured AGRICULTURAL IMPLEMENTS, suitable to meet the call of Farmers, Gardeners, Merchants, Captains of vessels, and others, viz: 1000 Ploughs, assorted sizes, from \$4 to \$15 each, comprising of the old common Bar Shear, Winand's Self Sharpener; Woods & Freeborn's patent, all sizes, "Davis," "Sinclair & Moore's" improved Hill Side Ploughs, highly esteemed for turning the furrow down hill, with wrought or cast shears; Wheat Fans, of various sizes and patterns, from \$15 to \$50 each, warranted to separate the garlic from the wheat; Corn Shellers, from \$12 to \$20; Cutting Boxes, from \$7 to \$50 each; Corn and Tobacco Cultivators, large and small; Expanding do., Wheat Cradles, warranted to have fingers of the natural growth, and Grass Scythes, &c. &c.; Castings, of all descriptions and patterns, by the lb. or ton, to suit customers, allowing a liberal discount to merchants buying to sell again—all of which will be furnished on the most pleasing terms and every article warranted to be of the best quality, in proportion to the cost price. All orders by mail or other-

wise shall be duly attended to with the greatest despatch.

We would particularly call the attention of Country Merchants and others, wishing to purchase agricultural implements to sell again, to the fact, that we will furnish them with articles on better terms than they can be supplied at any other establishment in the city. Our assortment is complete and as varied as that of the most extensive concern in Baltimore.

We have also connected in its operations with the above branch of business a complete assortment of FIELD AND GARDEN SEEDS, kept by Thomas Denny—Also Garden and Farm Tools, of various sorts and of the choicest collection, which will enable our customers to have filled entire all orders in the Agricultural and Seed Departments. mh 26 JOHN T. DURDING & Co.

FARMERS' REPOSITORY OF AGRICULTURAL IMPLEMENTS AND EAST-MAN'S CYLINDRICAL STRAW CUTTERS IMPROVED.

THE Subscriber informs the public that he has secured by letters patent his late and very important improvements on his Cylindrical Straw Cutter, by which improvements they are made more durable and easier kept in order. All the machinery being secured to an iron frame the shrinkage, wear and decay of wood is avoided. The feeding part of his improved machine is upon an entire different principle from the former machine; far more durable, requiring neither skill or care to keep it in order. These machines are so constructed as to make the freight on them less than half what it cost to ship the former or wood machines, an important desideratum to purchasers living at a distance; and I now offer it to the public upon the credit of my establishment as the most perfect machine in existence for the same purpose. They are also adapted to cutting rags for paper making, and for cutting tobacco as manufactured by Tobaccoists, &c.

I also keep these machines on hand made as heretofore with my new feeding machinery attached to them; and also a general assortment of Agricultural implements, as usual. Elliott's Horizontal Wheat Fans, and Fox & Bolland's Threshing Machines are both superior articles.

My stock of Ploughs on hand are not equalled in this city either for quality, quantity, or variety. I have a large assortment of Plough Castings at retail or by the ton, and having an Iron Foundry attached to my establishment can furnish any kind of Plough or Machine Castings on reasonable terms and at a short notice.

All repairs done with punctuality and neatness. On hand, a few Patent Lime Spreaders, Horse Powers, &c. &c.

Also just received, a fresh supply of Landreth's superior Garden Seeds. In store, superior Timothy and Orchard Grass Seed and Seed Oats. All implements in the agricultural line will be furnished by the subscriber, as good and on as reasonable terms as can be had in this city, with a liberal deduction to wholesale purchasers. Likewise will receive orders for Fruit Trees from Mr. S. Reeves' Nursery, New Jersey.

JONATHAN S. EASTMAN,

Pratt street, Baltimore, feb 20 Between Charles & Hanover sts

MORUS MULTICAULIS TREES.

The subscriber has from 25,000, to 30,000 Morus Multicaulis trees now growing at his residence, with roots of 1, 2, and 3 years old, which will be ready for sale this fall, and which he will sell on moderate terms.

EDWARD P. ROBERTS.

GROUND PLASTER OF PARIS,

Of superior quality, in bbls. on hand and for sale by JONA. ELLICOTT & SONS, south end of Patterson st. may 8 31

CONTENTS OF THIS NUMBER.

On the culture of wheat—the grain market—white carrots—use of swallows—timothy—herds grass—turnips—the corn crop—dutton corn—beet sugar in Michigan—the weasel—harvest drinks—pickle for butter—cure for lock jaw—specie in France, England and the U. S.—essay on the process of reclaiming land—rotation of crops—on clover and tillage—essay on sowing small grain—old and new husbandry—on feeding wet leaves to silk worms—the blackbird a non-depredator—advertisements—prices current.

THE FARMER & GARDENER

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, E. P. ROBERTS AND SAMUEL SANDS—EDITED BY E. P. ROBERTS.

No. 18.

BALTIMORE, MD. AUGUST 28, 1838.

Vol. V.

THIS publication is the successor of the late

AMERICAN FARMER,

and is published at the office, at the N. W. corner of Baltimore and North streets, over the Patriot office, at two DOLLARS AND FIFTY CENTS per annum, if paid within one month from the time of subscribing, or \$3 if after that time. All letters to be post paid.

BALTIMORE: TUESDAY, AUGUST 28, 1838.

A hint to Editors—The newspaper press throughout the country could not do a better service to agriculturists than by carefully obtaining information and publishing it with respect to the crops of corn, potatoes and buckwheat.

Relative value of Manures—The article which we publish to-day under this head will be found eminently instructive and useful, and we take pleasure in laying it before our agricultural readers.

We publish in this day's paper a number of accounts of the prospects of the corn crop throughout our country. We have done so, believing it to be our duty to keep our agricultural brethren advised upon all subjects of importance to their business and interests, and surely none can be more so than that of the corn crop at a time when we are threatened with a partial failure. Many of the farmers may have corn of last year on hand, to them the news we have collected will, we know, be acceptable, as they will thus be enabled to form their own judgment as to the propriety of sending it to market or of keeping it still longer to await the contingency of higher prices. Indeed, we know that the intelligence will be acceptable to all, for there are none engaged in the culture of the earth whose interests will not be more or less concerned.

We publish in another column a very interesting letter from the Hon. A. B. Allen, of Buffalo, New York, to the editor of the Wisconsin Culturist, from which paper we copy it. Mr. Allen is one of the most distinguished agriculturists of the great state of New-York; he combines in an eminent degree agricultural zeal with intelligence of a high order, and possesses a spirit of enterprise as indomitable as well directed.

The importance of farmers improving their stock is well illustrated in his brief remarks upon

the subject; nor is he less happy in his effort to set forth the value of those noble and generous races the Durhams and Devons, as well as the advantages of a cross between them for the purposes of the dairy. This will be very readily conceded when it is remembered that the great *Butter Cow* raised by that patriotic gentleman, the Hon. Charles A. Barnitz, of York, Pa. was herself $\frac{1}{4}$ Devon and $\frac{3}{4}$ Durham. She, when fresh, yielded 20 lbs. of butter per week, and so easy was the butter to churn, that her cream placed in a bowl has been converted into butter with a spoon in a few seconds.

The breed of hogs of which Mr. Allen speaks, as having been perfected by him, called the *Tuscaroras*, must, we think, prove a great acquisition to the stock of the country, and we should be happy to hear something further, viz.—whether they come to maturity at an early age, and at what age they attain the weight named? and—whether they are adapted to grass feeding?

With the cross of China and Berkshire, and the pure Berkshire, we are well acquainted, and can bear our humble testimony in corroboration of what is said in their behalf.

VITALITY OF TURNIP SEED.

The subjoined paragraph we cut from the Wisconsin Culturist, without any credit appended to it, but from the *location* of Judge Stilwell, we presume it originally appeared in some New York journal. The fact stated is, indeed, "remarkable," and although we are prepared to concede the utmost credence to the love of verity of the relater, we know not how to reconcile his statement with the every day occurrences with respect to the sowing of turnip seed. The experience of every farmer has long since taught him that if it does not rain within a few days after he commits his seed to the earth, that those seed will not come up, and hence it is, that the prudent farmer generally anticipates the regular time of sowing, in order that if the first seed he casts should *perish* that he may have time to *re-sow*. If then, a few days exposure to the influence of sun and air is sufficient to destroy the vitality of turnip seed, how is it that in the present instance, that twenty years of exposure to the alternations of the weather of spring time, summer, autumn and winter

—to the scorching rays of the sun and the biting frosts,—which intervened during that period, was insufficient to destroy their procreative powers? Was the slight protection afforded by the grass while the land was in meadows and pasture, potent enough to throw a panoply around the living principle of the seed? We have known buckwheat, rutabaga, and common turnip seed, to spring up after an interval of *one* year; but when we come to speak of *twenty-years*, it is quite another affair. If the seed in question had been buried sufficiently deep to be beyond the effect of heat and moisture—those active promoters of decomposition in vegetable matter—then we should have been able to have comprehended the *modus operandi* of their preservation—to have understood the principle by which they were saved from decay. Again—if the production which they received from their position in the matted grass, was competent to arrest the process of destruction, why is it, that it did not, for twenty long years, so far promote germination as to send forth the evidence of the life that was in it?

The foregoing reflections presented themselves to our mind on reading the paragraph, and we felt it our duty to state them in all respect and candor. Having done so, we will remark that the fact of those seed not only germinating, but growing and coming to "*high perfection*," would seem to repudiate the idea which has obtained a too current belief, that if turnip seed be buried with any thing but a "*bush harrow*," they will not come up, as the *tines* of ordinary harrows bury them too deep to vegetate. The "*bush harrow*," is an implement, if we may so term it, which we have used, but never without feeling repugnance, and could wish to see it banished from use altogether, believing it as inefficient and unequal in execution as it is unsightly in appearance in this age of improvement, when the ingenuity of man has overcome space, brought distant points into close neighborhood, and so simplified machinery as to do away with more than a moiety of human labor.

VITALITY OF SEEDS.

The following remarkable fact, showing the long retention of vitality in seeds when lying upon the ground, has been related to us by Judge Stilwell, of St. Lawrence, as having taken place in his immediate neighborhood and under his own

personal observation. Twenty-one years ago a neighbor cleared and burnt a piece of ground, and harrowed in grass seeds and turnips. The ground lay 12 years in meadow, and 8 years in pasture, when the plough was put into it for the first time preparatory for a tillage crop. It was soon discovered, after the soil had been turned over, that it promised a crop of turnips, which must have come from seed grown upon the ground nineteen years before, many of the roots having been left in the ground over winter, and suffered to seed. A part of the plants were left to grow, and came to high perfection.

MORTALITY AMONG CATTLE.

It will be seen by the subjoined paragraphs, that a most malignant disease is prevailing among cattle in two remote regions of our country. The suddenness of the attack and death, and the contagious nature of the malady, are circumstances which are truly alarming, as while the first characteristic of it, in a great degree, would seem to forbid the hope of successfully combatting it, the latter discourages exertions, for contact with the carcasses of the dead animals have both in Kentucky and New Hampshire proved fatal.

Disease in Cattle—During an excursion in Stafford county, (New Hampshire), the present week, we learn that between 30 and 40 cows, besides other cattle, have died in Rochester, Somersworth and the neighboring towns within a few weeks. Some suppose they are affected by the black murrain, others think that they fed on some poisonous shrub. In most cases they die soon after they are taken, and so soon become putrid that they require immediate burial. We have heard of two cases where men were poisoned in attempting to skin the animals, and but for immediate medical aid probably would not have survived. One man lost six cows out of his eight. We heard of five sheep which were found huddled together as they usually rest, all of them dead. So sudden had been the attack, in one case a cow which had been milked in the morning without being perceptibly affected, was found dead by the person who went into the yard a short time after to drive her to pasture.—*Portsmouth Journal*.

SINGULAR FATALITY.

Woodford Co. (Kentucky,) June 25, 1838.

To the Editor of the Franklin Farmer :

Sir : A circumstance so singular and at the same time so fatal, occurred in my neighborhood a few days since, that I am induced to furnish you a detail of it for publication.

A poor man by the name of Francis Nave had the misfortune to lose the only cow he had by death from a tumor or swelling of the throat—Wishing to save all of her that was valuable, he skinned her and took the hide to the tanner on the only horse he possessed. Shortly after his return, his horse was taken with a swelling of the throat and soon died : and the hogs that ate of the dead body of the cow, which were all he had, died also in the same manner ; and some of the hogs of his neighbors that ate of the dead car-

cass also died ; and lastly, to close the tragedy, the poor fellow himself fell a victim to the malignant poison which was communicated to his system by means of a sore on his hand.

Yours, &c.

BIRD SMITH.

The above is a most extraordinary case, which might well be doubted, did not the public find a guaranty of its truth in the well known character and integrity of the writer.—*Ed. Frank Farmer*.

THE CORN CROP, &c.

It was feared that the corn, which has nearly all been blown down, would seriously suffer, or be entirely destroyed. The ground however having been thoroughly drenched before the corn fell, the roots are consequently not broken, and hopes are now entertained that, generally, it has been benefitted.—*Winchester Repub.*

The Drought—Loudon county—The Leesburg Washingtonian of Saturday senth night says : “We are suffering under a drought believed to be unprecedented in this region. Combined with the intensity of the heat, its effect has been most disastrous to the corn crop, its appearance being more unpromising than ever before known in the region of country here referred to. It is past redemption, and cannot yield more than the fifth of an average crop. Its decided failure will be most seriously felt, as it is of more general use than any other grain used in our country.”

The Nashville, Ten. Republican Banner of Aug. 9, says :—A gentleman who has been for several weeks travelling through the Western District, writes us under date “Bolivar, Aug. 2d. We have very warm, dry weather in the district. Many of the farmers are cutting up their corn to save the fodder. A great number of cornfields that eight weeks ago bid fair for ten barrels to the acre, will not produce one. The farmers are wearing sorrowful faces. Water is also very scarce in many neighborhoods. Vegetables of every kind are nearly burned up, except tomatoes and watermelons.”

From the Richmond Enquirer of Aug. 17th :

The Drought—The weather continues cool, and the skies overcast with clouds ; but no rain. Some other parts of the state and the union have been more fortunate, than we are. There have been fine rains in Fauquier county. A gentleman who left this city on the 6th, writes us from Staunton on the 11th : “On my way I have heard universal complaints of drought ; and indeed saw painful evidence of it in the arid condition of the country. From Richmond to Charlottesville, I saw but one good corn field of any extent, and that was beginning to suffer. But, for the last 30 hours there have been frequent and refreshing showers in this part of the country. The stream that passes through Staunton has been swollen to a perfect torrent, inundating all the low places.”

The rains have been singularly partial, in N. Carolina, as well as in other states on the Atlantic. The Milton Spectator of Tuesday last states, that “the drought still continues to an alarming extent in this neighborhood, and almost every where (from which we have seen accounts) throughout the country ; accompanied with a disastrous intensity of heat to both the animal and the vegetable kingdoms : the latter of which seems to have become perfectly lifeless for want of rain.” But

the Salisbury Watchman of Saturday says, that “we have been blessed at length with a rain that extends, we learn, throughout the counties of Davie and Rowan. We had begun to suffer greatly from drought, but we have already observed the revived appearance of the corn.”

The Alexandria Gazette states, that “the Corn crop in the lower counties of the Western Shore of Maryland is said to be promising, the rains there having been quite abundant. The late rain, however, is said not to have been in time enough to save the corn in the upper country in Virginia.”

The Drought—A most distressing drought has prevailed in this county for the last six or seven weeks, and the corn crop, it is thought, will be very short—not more than the fourth of a crop can be made in some parts of the country. We have seen some fields that looked exceedingly promising a few weeks since, nearly burnt up—in other parts of the county they have had partial showers, and will probably make half a crop—The pastures are also burnt up. From the annexed extracts it will be seen that the drought is pretty general.—*Fincastle Democrat*.

The following report on the crops of Wheat, Rye and Corn in Pennsylvania, is published in the Commercial List of Philadelphia :

As far as we have been able to obtain correct information, the following report of the crops might be considered as embracing all the counties in Pennsylvania east of the Alleghany mountains, and all New Jersey. As it is the result of personal observation in a great measure, it may be relied on :

Wheat—The crop is decidedly better than for the two past years, but still short of an average one. Heads, in general short, compared with those of very productive years, and in a large portion of the district, rather light on the ground—The quality is good when not injured by mildew, and this injury is partial—not extending to more than one-fifth of the crop—well secured. The product, per acre, will average about three-fourths of a good yield ; but as there has evidently been a diminution in the breadth of ground for Winter wheat, the aggregate result of the crop will not exceed two-thirds of a fair average crop of former years, nor one-half of the abundant crop of 1830. Spring wheat is almost universally a failure, and will not pay for the seed.

Rye—With a superabundance of straw, and great prospects of a fine crop, the farmers are greatly disappointed in rye, as the heads are found to be very unproductive, and the grain generally of poor quality. As there was an increased breadth of ground for rye in many parts, the crop may turn out one-half of an average of poor quality.

Oats—This is very generally a light crop, and much of it has been cut prematurely, to save it from destruction by grass-hoppers. The yield may be about two-thirds of an average.

Corn—The appearance of the crop of Indian corn, was unprecedentedly fine, the middle of July, in all the near counties, but the continued heat and drought since has already destroyed the expectation of a crop on all light soils :—and in the best soils the farmers’ hopes are nearly blasted. An early and general rain may yet save much corn, but would scarcely make over two-thirds of a common crop.

Buckwheat—Very little above ground; and much that had been some time sown, has not vegetated. Altogether it is an uncertain crop, and generally given up by farmers.

Potatoes—The crop of early potatoes is very short, and that of late is likely to be an entire failure, except in some few moist situations. The loss of this crop will prove very serious to the country.

Hay—The first crop is good and well secured: but no second crop can be made—the pasture fields generally being without verdure.

The Corn Crop—A morning paper seems to be of opinion that the estimate of the present corn crop at "one-fifteenth" of the usual quantity, is quite a liberal one, and though to many it may appear an extravagant and melancholy foreboding, it remarks that "every farmer in Maryland, (especially in the upper counties) will attest that it is short of the truth." This, indeed, may be, and unfortunately is too true of Maryland, "especially the upper counties;" and is perhaps nearly equally true of the extensive corn growing regions of Pennsylvania and Virginia. But when we speak of "the corn crop" without limitation, the expression of course has reference to that of the whole union. In that comprehensive view of the matter, and after witnessing the destructive effects of the drought in some large sections of country, it is gratifying to find that the prospect is fair for a yield far exceeding "one-fifteenth of the usual quantity." This, indeed, for the crop of the union, would be little better than a total failure, which would be a public calamity, of the most disheartening aspect, and which we could not be willing to admit as impending over this fair land, upon any thing less than universal concurrent testimony. That the testimony in the aggregate is not of this appalling character, must be gratifying to all.

It may not be amiss to add that on Monday of the present week, corn sold in this market at upwards of one dollar the bushel. This was a rise of 25 cents in the course of a few days. Yesterday, sales of corn were made at 86 cents. Whence this fall of 14 cents in four days, except as shewing a more matured opinion as to the real magnitude and extent of the failure of the corn crop? If the "one-fifteenth" doctrine generally prevailed, the change since Monday would probably have been the other way.

With a view to illustrating our own opinion of the matter, and so far as may be, the actual state of the case with regard to the corn crop of the U. States, we copy all and singular the notices of the "weather and the crops" which come to hand by this morning's mail:—*Baltimore Pat.*

GEORGIA—*The Baden Corn*—A letter to the editor of the Augusta (Geo.) Sentinel, from Burke county, in that state, dated July 24, says: "The largest crop of corn ever raised in this county, has been raised this season on the plantation of Isaac Carter, from the Baden seed. Mr. Skinner, the overseer, states that the gourd eye corn will not average more than five ears to the stalk, whereas the Baden seed yields from eight to twelve ears to the stalk; he also states that he noticed on a stalk of the Baden 13 large ears, nine shoots that had silk on them, and four shoots that had no silk on them at the time, but he thought they would have time enough to make nubbins,

which would make 22 large ears and four nubbins to the stalk?"

TENNESSEE—*The Crops, &c.*—We learn from a correspondent at Bolivar, Tennessee, that the corn crops in the southern counties of the district, which a few weeks ago looked so promising, have been almost ruined by the present drought.—*Nashville Whig.*

MISSISSIPPI—A late Southern paper says:—"The cotton crops in Mississippi are said to be in a promising condition, notwithstanding the late long drought. The continuance of dry weather gave the planters an opportunity to clear away the grass; and the recent rains found the fields thoroughly clean, with nothing to impede the rapid growth of the cotton. The condition of the corn crop is not favorable. This is not so hardy a plant as cotton, and is sure to suffer more for the want of rain."

FLORIDA—We are happy to be able to say, that notwithstanding the long continued drought in the early part of the season, the crop of corn is coming in heavily, and the promises are most flattering for sugar and cotton. Corn, however, at present prices is far the most important crop. We understand that one of our Alachua friends, who has had to pay three dollars a bushel for corn for the last year, has a crop which is good for at least four thousand bushels! Very truly do we congratulate and rejoice with him.—*Jacksonville Cou.*

DELAWARE—*Corn Crop*—We have made enquiry of a number of the farmers of this county within a few days past, in relation to the extent of injury done to the corn by the late and unprecedented drought, and we are pleased to learn that the consequences are not so alarming as we had reason to suppose. From the information which we have received, we have no hesitation in saying that the alarm created by the croakers is without any foundation, and that the crop will be a very good if not an average one.—*Delaware Gaz.*

The Delaware State Journal states that the long continued drought and the extreme heat of the weather have been very injurious to the vegetation in that vicinity. For the last four weeks there has not been rain sufficient to lay the dust, and this, with a parching sun and drying winds, has blighted the prospect which a few weeks since was very flattering. The same paper adds, "farmers are talking of cutting down their corn to save it for fodder. The earth is baked and the sources of vegetation dried up."

VIRGINIA—*The Crops*—Letters from the south side speak of the prospects of the farmer and planter as gloomy indeed. The corn crop in many sections is almost entirely destroyed, and in most of the counties half a crop will not be made. The following is an extract from a letter from Buckingham, Aug. 12th: "The drought still continues. All nature languishes under the scorching rays of the sun. The farmers are brooding over the gloomy future. Scarcely any corn will be made. The fields are so exhausted, the corn withered to the tassel, that no rain can revive it. The wheat crop though rather more than an average one, will be consumed at home."

The Drought—An intelligent friend from Marshall county, informs us that farmers in that part of the country have suffered very much from the late drought. The oats and corn crops will not yield more than one half of the usual quantity. In

consequence of very little rye being grown in this country, it is feared that the wheat, of which there has been an abundant yield every where, will have to be used for many purposes at home instead of corn and oats.—*Wheeling Gaz.*

The long dry spell of weather, of six or eight weeks' duration with which this region has been afflicted, ended happily and pleasantly on Saturday. Since that time the temperature has been agreeable, and every thing looks bright and beautiful.—*Virginia Free Press.*

The late rains have been general, and of great advantage to the crops.—*Alex. Gaz.*

LOUISIANA—The New Orleans Bee of the 4th inst. says, that a heavy shower of rain had fallen there almost every day during the week.

MASSACHUSETTS—The Boston Courier says: "The country never appeared better than at the present time. After a long season of drought, and the farmers had become disheartened about their potatoes and corn, they have been visited with healthful showers, and now show signs of contentment and joy. We learn from the neighborhood of Connecticut river, that there is no doubt of a profitable season. The hay is all in, and is abundant. The wheat has nearly all been harvested, and other productions have been got in, or are ready to be got in, and in good order and in good season. It was feared that potatoes and corn would suffer from the dry weather, but the late rains have altered the complexion of affairs very much for the better."

MAINE—We have the most cheering intelligence from the farmers in every part of Maine. The harvest, they say, will exceed the expectations of the most sanguine. Wheat and corn never looked better, and some of the most luxuriant crops ever produced in the country, will be raised "down east."—*Portland Adv.*

MICHIGAN—The corn crop in this state the present year promises to be immense. We hear from all quarters that an unusual number of acres was planted, and that all of it looks uncommonly well.—*Detroit Free Press.*

PENNSYLVANIA—*Corn*—The appearance of the crop of Indian corn was unprecedentedly fine, the middle of July, in all the near counties, but the continued heat and drought has already destroyed the expectation of a crop on all light soils—and in the best soils the farmer's hopes are nearly blasted. An early and general rain may yet save much corn, but would scarcely make over two thirds of a common crop.—*Phil. Com. List of Aug. 10.* [There have since been a couple of general rains.]

OHIO—After a furious drought, Heaven in its mercy, has visited us with a delightful rain. The farmers are in ecstasies; and the lovers of corn bread are once more in spirits.—*Massillon Gaz.*

Early Sioux or Dutton Corn—We yesterday received from our friend, Buswell, a goodly mess of the above kind of corn, in fine order for boiling. It was planted on the 25th of May, and consequently has been in the ground 11 weeks.—*ib.*

The corn crop in the lower counties of the Western Shore of Maryland, is said to be quite promising, the rains there having been quite abundant.—*Baltimore American.*

Foreign Crops—The weather in England had been excellent for the crops up to the last advices.

The prospect, it is stated, is for an average crop of all kinds of grain in Great Britain.—*Eng. pap.*

[We will continue the publication of the accounts from different quarters in our next.]

DURHAMS GONE TO WISCONSIN—CROSSES OF CATTLE—DO. OF THE DEVONS—FINE RACES OF HOGS—A NEW BREED.

Buffalo, 13th July, 1838.

SIR—

I am favored by the first five numbers of the *Culturist*, the reception of which, was no less surprising than gratifying to me. Though some time a resident of this city, and as I thought pretty well up to the march of civilization west, it is only two years since that even the name of the place of your spirited little publication had reached my ears, and now I find you a Lake port of considerable importance, a thriving town, with docks, warehouses and stores, mechanic shops, and elegant public and private buildings, and above all, surrounded by an enterprising, intelligent, and rapidly thriving farming population, and supporting too, an agricultural periodical, that western New York, ten years ago, advanced as it was, scarce durst project. This speaks volumes for your young community, and the way that Milwaukee has commenced establishing an enlightened agricultural basis, is the right way, and if judiciously continued, will command for her, solid wealth and greatness. Such wealth and greatness, as no speculating mania, or tyrannical government orders and circulars, can either subvert or overthrow.

The first and most important matter of attention on the part of the cultivator of the soil, after the production of grasses, roots, and grains, should be that of a *choice stock of animals* for their consumption; and allow me to say, that so far as cattle are concerned, Wisconsin has a treasure in the superb Durhams taken out thither by Mr. Reed. I can speak of them from personal observation, they having staid a few days at my farm on their way west. The Ohio Company in its numerous importations has not brought over superior animals, and I sincerely trust that for Wisconsin's own interest, they may meet with that patronage they so justly merit. When we first introduced our Durhams into this vicinity, the dairy farmers were in the habit of inhumanly knocking their calves in the head as soon as dropped, because they were not worth the milk they consumed, either till they were fit for the butcher or raising, but now since they have commenced using our bulls, they are offered for the produce at a few weeks old, as much as a whole summer's dairy is worth, which shows at once the value of what are no more than half bloods, in the public estimation.

We have been taking crosses for the past three years from the Devons for the purpose of keeping the Durhams primely up to the mark, the moment we shall detect the least deterioration, adding perhaps a greater fineness to their limbs, and imparting more of the deep red that is so much admired in their color, and still further hardening their admirable constitutions. In this course we are backed by the opinions of the most eminent breeders of England and America. I need only mention the names of the late Rev. Mr. Berry, Lord Althorp, (present Earl Spencer,) and Mr. Whitaker, of the former, and Messrs. Van Rensselaer, King, Hall,

and Rotch, of the latter country. Mr. Hall says emphatically that the produce of a Devon cow is the most perfect animal that can be made. My own opinion however, is in favor of two or three crosses of the Durham, to one Devon. These we are still mostly keeping as a distinct stock, and separate from the pure Durhams. Our Devons are from the herd of that eminent agriculturist and breeder of this beautiful race, Mr. Coke, (now Earl of Leicester,) and two young bulls that I now have on hand are as fair in their points as an Arabian horse. There is nothing like them to cross with our native cow, for working oxen, and the milk and beef of their produce would also be a very great improvement.

I took up my pen to correct a notice that appeared in the third number of the *Culturist* of a breed of hogs that I have been sometime endeavoring to perfect, to which I have now given the name of Tuscarora, but find I have completely wandered from the main subject; allow me therefore to still do so, before closing my already lengthened epistle. It is not the "size" that I have been aiming at, for *nothing is easier than to produce a great overgrown hog*, and nothing is more *valueless* when done; but it is a reasonable weight of carcase, uniting in it large tender juicy hams, thick delicate side pieces, and small head and ears, and all supported by as fine limbs as can well carry the superstructure. The average weight of a full grown Tuscarora, is about 450 to 500 lbs., and I find that this is as large a hog as can be well grown *without coarseness*, and sufficiently so in my humble judgment for profit. With this size they unite to nearly the aptitude to fatten and quietness of the China, a superior beauty of frame, and every good quality of the Berkshire. They breed numerously, ten to fifteen at a litter, their pigs are very hardy as soon as dropped, and the dams are the best and most careful of nurses, and take them all in all as a farm hog. I really do not know their equal.

Together with them, I also keep the improved China and Berkshire. Nothing is equal to boars of the former breed, for reducing the long snouts and legs of the common wood hog, and adding breadth and depth to his carcase, without lessening the weight. Of the latter, though my selection is of the largest class among them, there are no finer of their kind, and all were procured without regard to price.—Gentlemen may judge, when I tell them that my new young Berkshire boar, ordered out this spring, though but a pig, cost me here the sum of fifty-one dollars. I am considerably increasing my stock of cattle, horses and hogs, I hope soon to be able to supply all orders addressed to me from abroad, and residing at the greatest shipping port on the lakes, a considerable expense in freight and charges is saved on animals ordered from this port over those shipped still further east.

With my best wishes for the certain prosperity of yourself and thriving territory,

I am, very respectfully,

Your obliged friend,

A. B. ALLEN.

W. P. PROUDFIT, Esq.
Milwaukee.

Horrible Effects of Hydrophobia.—We learn that a horse belonging to Mr. James Haggerty, living in Christian st., Southwark, which was bitten by a rabid dog, about a month since, was

observed to be taken very sick on Saturday morning after having drank a bucket of water, and so rapidly and violently did the hydrophobia spasms increase upon him, that, as he was haltered in the stall, by 10 o'clock he had bitten the flesh all off his fore legs, shoulders, and wherever else his halter allowed him to reach himself. His agony is described as so intense, that he would take a piece of flesh clear out at every attempt, and mouthfuls were torn out in quick succession, during the piteous moanings of the poor beast, while his teeth would snap together, so as to be heard plainly for some distance. He however became so furious that he broke from his fastening and raved round the stable, until, through fear that he would break out, and to end his misery, he was humanely knocked in the head. We understand that his mate, the horse usually driven with him in a hack, was bitten by the same dog about the same time, and it is feared that the same horrid result will follow with him.

From the Genesee Farmer.

RELATIVE VALUE OF MANURES.

Since the great truth in agriculture, that manure forms the basis of all successful farming, has been more fully developed and better understood, the attention of agriculturist, in foreign countries and in this, has been directed to the discovery of the most efficient articles for this purpose, and the best methods of applying them. So convinced have scientific, as well as practical men, on this point, become, that on their representations, the government of several European countries have ordered extensive investigations to be made, and experiments carefully instituted, to determine several questions relating to manures, upon which farmers and experimentalists were not entirely agreed.

The Prussian government, which, in every thing relating to the welfare of the people, in giving them every advantage of education, and the benefit of every improvement in agriculture, has evidently taken the lead, and in conjunction with the Saxon authorities, appointed Professor Hembstadt, of Berlin, to superintend a series of experiments, and publish the results for the use of the public. The effect which the application of night soil and urine had produced on the agriculture of Flanders, where they had been most extensively used, induced the governments of Berlin and Dresden to place under the directions of the Professor, the contents of the city drains and cesspools, for the purpose of attempting the recovery of the barren and light soils in the neighborhood of those cities. Thus countenanced, that eminent agriculturist, in conjunction with other learned men and practical farmers, commenced a series of experiments, which were carried on for a number of years, and varied in every possible way, in order to avoid all sources of fallacy. The results of these experiments have been published by Hembstadt, and have led to extensive and successful agricultural improvements.

Professor Schubler, the writer of the most esteemed, and certainly the most able, Treatise on Agronomia, or the best method of knowing and treating every species of land, since the death of Hembstadt, has repeated and added to the experiments of that professor, obtaining the like results in almost every instance. These he has published in a tabular form, which have since passed in-

to the hands of all the large practical farmers of Germany, and have formed the basis of instruction on manuring, in the hands of professors of agriculture, whom many of the continental governments have with great advantage established in institutions purposely formed to disseminate useful and practical truths in the art of farming.—From these tables Dr. Granville, in his report to the Thames Improvement Company, in speaking of the immense source of agricultural wealth which the sewers of London afford, but which is now worse than lost, makes the following statement of facts furnished by them.

If a given quantity of land sown, and without manure, yields three times the seed employed; then the same quantity of land will produce—

5 times the quantity sown, when manured with old herbage, putrid grass or leaves, garden stuff, &c.

7 times when manured with cow dung,

9 times with pigeon's dung,

10 times with horse dung,

12 times with urine,

12 times with goat's dung,

12 times with sheep's dung; and

14 times with night soil, or bullock's blood.

Or in other words, an acre of land sown with two bushels of wheat, without manure, will produce—

6 bushels,

10 " with vegetable manures,

14 " with cow dung,

18 " with pigeon's dung,

20 " with horse dung,

24 " with goat's dung,

24 " with urine,

24 " with sheep's dung, and

28 " with night soil, or bullock's blood.

But if the land be of such quality as to produce, without manure, 5 times the sown quantity, then the horse dung will yield 14, and night soil 19 $\frac{3}{4}$ the sown quantity; or land that will yield without manure 10 bushels an acre, manured with horse dung will produce 28, and with night soil about 39 bushels of wheat per acre.

These results, and multitudes of recorded experiments prove that they in no case vary far from the facts, show the immense superiority of night soil, or Flemish manure, over any hitherto employed. In addition, Dr. Granville found that some crops which yield large profits, and are so extensively cultivated in both Flanders, can only be obtained in abundance, and of the finest quality, by employing what may be emphatically be termed Flemish manure in the preparation of the soil.

Another important matter in the comparative value of manures, and of essential practical interest to the farmer, has been established by the same authoritative investigations; and that is, that while night soil has produced fourteen times the quantity sown, where horse dung has yielded only ten—the proportion of the former, or Flemish manure, was, to the horse dung employed, only as 1 to 5; so that with one ton of the Flemish, a larger produce was obtained than with five tons of the best stable manure.

Dr. Granville has drawn some valuable inferences from these truths.

"In England a ton of good stable manure sells for five shillings. Now an acre of arable land in

an ordinary state of cultivation in England, is manured with 20 tons of horse or stable manure every 4th year, according to Professor Coventry, and consequently entails an expenditure of £5 in that year. It then produces ten times the quantity of wheat sown. But an acre of the same land similarly sown, and manured with Flemish manure, would require only four tons of it, and which, at the price we have fixed for it, (12 shillings a ton,) would be an expense of £2 8s. It would then produce fourteen times the quantity of wheat sown on the acre. Supposing the produce of the acre manured with horse manure to be 5 quarters of wheat, and to sell for £15, that of the acre manured with Flemish manure, will be seven quarters, and sell for £21. The result of this comparative farming operation, therefore, would be:

1st, a saving in manure of £2 12s. per acre.

2d, a surplus produce of 6 00 per acre in money.

Total in favor of night soil, £8 12s. per acre.

"Dr. Granville states, that he was assured by Mr. Smet, a great farmer in East Flanders, that a measure of wheat land corresponding to an English acre, manured with Flemish manure, produced last year 7 $\frac{1}{2}$ sacks of wheat of the best quality. The sack contains four measures, each weighing 180 pounds of 16 oz. each; consequently there grew upon the acre 5,400 pounds of wheat, or 90 bushels."

The heaviest crop of wheat we have ever known produced in this country, was the one for which Mr. Blackmore, of this county, received the premiums, 64 bushels per acre. The capabilities of the soil, therefore, when put in the best condition, is little understood, or the amount of food an acre can produce, not generally known. The science of agriculture is yet in its infancy, however venerable and ancient the practice may be; and perhaps in no branch of it is our knowledge more defective than in that relating to manures.

QUERY, NO. 6.—RIPENING OF GRAIN.

"Is it certain, that if corn, or any other sort of grain, be severed from their roots while short of maturity, any valuable accessions will afterwards be made to the grain? It is said of unripe corn, that the ripening process will go on after the plant is cut up by the roots. So too of wheat, that it will come to perfection, although cut several days before it has arrived at maturity. This, I think, I have witnessed. Some years since, I had occasion to open a way to a meadow which I wished to enter, and I cut a small strip of wheat while so green as to be supposed of no value except for fodder. This was spread on grass, and after a few days, I was surprised to find the berry was good, and but little inferior to that which stood till it was fully ripe. Now, did these wheat kernel, after the cutting, really receive accessions? or was the alteration caused only by drying and consolidating? If they received accessions, whence came they? from sap ascending from the stems and leaves below, or from the atmosphere. Is it likely that sap moves at all in plants after they have been cut and become wilted?"

A FARMER."

It will be perceived, that this query of our correspondent involves points of great interest to the farmer. Properly decided, it would determine

the propriety of cutting up corn by the bottoms, and the best time for harvesting wheat, two questions of vital importance to the cultivator. For ourselves, we think that the process of vegetable nutrition is but very imperfectly or scarcely at all understood; and that the cause of the circulation of the sap, and the conversion of that substance into the farina or starch that gives the principal value to grain, as well as the respective action of the earth and the air in effecting these changes, require much investigation before positive answers to the several parts of this query can be safely given. Experience has, however, done something towards an understanding of these topics, and it is to that test, in the present state of our knowledge, we must principally refer.

We think that experience has plainly decided, that accessions are made to the corn after the stalks are cut at the bottom; and that to nearly or quite as great a degree as if left standing on the hill; and more than if, as was formerly the custom, corn was topped when first beginning to glaze, or early in the season. That corn receives accession from the stalk after it is cut up, is proved by the fact, that an ear severed from the stalk at the period of glazing, will be very imperfect and the grain inferior, a result not observed when the ear is left on the stalk, though the stalk be severed from the roots. After the formation of the ear has commenced, the berry or the kernel is the point to which all the efforts of nature are directed; and this is continued until the process is complete,—the juices desicated and rendered incapable of absorption,—or the supply of nutritive matter exhausted. As the juices become thicker in consequence of the nonsupply of sap from the root in the plant, the deposition becomes more active and rapid in the grain, so long as it moves at all, or till the kernel is filled; which will in part account for the fact, that grain severed from the root, after the proper supply of nutriment for the kernel has been elaborated in the stalk, ripens so much quicker than it would if left attached to the root.

In the case of the wheat mentioned by our correspondent, it is clear the supply of nutritive matter destined for the berry had all been elaborated, and the only material difference in the process of ripening was, that the matter not receiving supplies of sap from the root, was more quickly deposited than it would have been if subject to that dilution; or, in other words, it ripened so much the earlier. A somewhat similar case occurred to ourselves a few years since. To get to a meadow conveniently, it was necessary to cradle a swath or two through an oat field. The oats were very heavy, but quite green, so much so, that a second growth sprung up from the severed stalks. They were left in the swath until partially hayed, when to clear the ground, they were bound in very small bundles, and set up in a clear place where the air could have free access. Contrary to our expectations, they saved well, and exhibited a finer berry than many of the frost-bitten oats of two or three years past could do, though very far inferior to those that ripened in the field. In this instance, the substance for perfecting the kernel had not been elaborated in sufficient quantity, hence they were necessarily imperfect. A few days since a farmer assured us, that last year in mowing one of his meadows, in order to cut the whole of a patch of Canada thistles, he found it necessary to mow a small quantity of

wheat that adjoined the grass. As the wheat was only fully in the milk, he concluded it would be of no value and raked it with the hay, where it was dried and cured. On examining some of the heads this winter, to his surprise he found the berry bright and plump, apparently as much so, as that which ripened in the field. These instances, we think, prove that accessions are made to grain after it is severed from the roots. Drying and consolidation alone, if no farinaceous matter was added, would only shrivel the grain; it could not cause it to remain filled and plump. As the proper period of harvesting wheat is an object of much importance to the farmer, as the least injury or the least benefit per bushel, amounts to an immense quantity in the aggregate, we shall give the opinion and practice of some of the most eminent British agriculturists in the matter, as such extracts may assist in forming correct conclusions.

In the second vol. of *British Husbandry*, page 136-7, it is said,—

"The question has been for some time agitated, regarding the state of ripeness in which grain should be reaped; and it has been recommended as a general rule of practice, to cut down the crops before the uppermost grain can be shaken out. * * * Taking these things into consideration, it seems the most prudent plan to have the grain cut before it is fully ripe: but in this a medium course should be adopted; for although grain if allowed to become too ripe, assumes a dull, dusky hue in the sample; yet, if not ripened enough, it shrivels in the drying."

London asserts—"That in harvesting wheat, the best farmers, both in Britain and the continent agree, that it ought to be cut before it becomes dead ripe. When this is the case, the loss is considerable, both in the field and in the stack-yard; and the grain, according to Von Thaer, produces an inferior flour."

Cadet de Vaux remarks—"That corn (grain) reaped eight days before the usual time, has the grain fuller, larger, finer, and better calculated to resist the attack of the weevil. An equal quantity of the corn thus reaped, with corn reaped at maturity, gave more bread, and of a better quality. The proper time for reaping, is that when the grain, on being pressed between the fingers, has a doughy appearance, like the crumb of bread just hot from the oven."

In the 'Reports of Select Farms,' in the report from the Scoresby farm, worked by Mr. C. Howard, it is said:

"Wheat ought never to be allowed to remain uncut until it is fully ripe. Experiments, easily made, will prove to every cultivator of it, that by permitting it to stand until the straw has lost its succulency, he gains nothing in plumpness or bulk of grain, but loses much in color and fineness of skin; besides which, he incurs the risk of shelling by a high wind, or by its being cut under the influence of a burning sun. When fully ripened by standing in the stook, no dry hour should be lost in getting it well secured."

Such extracts might be multiplied, but it is unnecessary. The observation of every farmer must convince him of the superiority in appearance of color and quality of early cut grain, over that which is dead ripe. One is clear and white skinned, the other dull and dusty, and the effect on

the flour is very perceptible. We all remember the time when the Baltimore flour was considered superior to the northern; and a writer in the *Baltimore Farmer* assigned as a reason for this inferiority in the flour produced north of Pennsylvania, the practice of allowing the wheat to stand dead ripe in the fields, until the berry was discolored. Now the tables are turned, not only as regards the quality of our wheat, but our flour also.

If the remarks which have been made, and the extracts given, cannot be deemed entirely conclusive, as to the fact that corn or grain does receive accessions after they are severed from the roots, they must, we think, be satisfactory, in showing that the practice of cutting corn and grain early is well founded, and when a proper medium is observed, cannot be injurious. We, however, consider the question, in some respects, as open for further experiment; and if our correspondent, than whom, no one is more capable, will institute a series, we should be most gratified in laying the results before our readers.

From the Wisconsin Cultivist.

THE CULTIVATION OF WHEAT.

Communication read before the State Agricultural Society, by H. HICKOCK, Esq.

There are two causes which, when our winters are open, operate injuriously on wheat crops. One is, the high and dry winds which prevail in March, these blow off the soil in many situations, and, by leaving the roots of wheat exposed, occasion their destruction. Another cause is the heaving of the soil, occasioned by the alterations and warm weather. The water in the soil, in the act of freezing, expands and raises up the earth, and also the roots of the wheat-plants which the earth embraces; when a thaw succeeds, the earth being heaviest, falls down first and leaves the roots of wheat a little elevated, and by repeated changes of the weather, the roots are so far thrown out as to perish.

Farmers, when convenient, usually sow their winter grain early in September, upon a supposition which guides their common practice that grain thus early sown withstands best the action of unfavorable seasons. This supposition is founded upon the very plausible theory, that as the oldest roots will be longer and more numerous and take a firmer hold on the soil than those which are younger, they will be the least exposed to be thrown above it, and at the same time, from their greater strength, be more tenacious of life. But experience informs us that wheat, sown as late as the first or even the second week in October, very often survives with less injury than that which is sown in the early part of September. Indeed farmers very generally admit, as the result of their experience, that rye, whose law of vegetation must be nearly the same as those of wheat, sown so late in the season as barely to come up, is most likely to withstand an unfavorable winter. But still the very plausible theory which has been mentioned very generally induces them to sow rye early as well as wheat, in direct opposition to conclusions which have been drawn from actual observation.

An experiment was made last autumn for the purpose of collecting some further information on this subject. On the first day of September last I excavated a spot of ground six feet square. On

the one side, the excavation was about six inches deep, on the opposite side, its depth did not exceed one inch. Seed wheat was placed over the bottom, so that the kernels were about four inches distant from each other, the excavation was then filled up. The soil was a suitable mixture of gravel, sand and clay, for wheat, and of ordinary fertility. This was the latter part of the extreme drought which prevailed last summer, and the soil was dry, warm and finely pulverized before it was thrown on the wheat. These circumstances, except the extreme dryness of the soil, were highly favorable to the vegetation of seed at the greatest depth in the earth.—On the fourth of the month there was a heavy shower which not only wet the soil, but beat it down close and hard. On the ninth of the month the plants began to show themselves, but nothing came up from a greater depth than about three and one-half inches. Two or three days after the second leaf had displayed itself, some of the roots were taken up and examined. It now appeared that nearly an inch below the surface of the ground, a new joint was found which was the bases of the second leaf, and also of a new system of roots. There were now two tiers of roots; the seed or knot adjoining it, had generated the lower tier, and the new joint the upper one. These two tiers or systems of roots were connected together by a root resembling a cord or thread, and, in one instance, I cut off this connecting thread and transplanted the upper part. This grew with little apparent check from its curtailment; but the under part died, although the soil above it was opened so as to afford it the advantages of air and solar heat. On the 20th day of September, I examined another plant, which had its two regular formations as expected, and, what was not expected, a blade was discovered about an inch long, which had started from the lower system of roots, and would doubtless have found its way to the surface, had it not been disturbed. It is to be remarked, that this plant sprung from seed placed under cover of nearly four inches of soil, which was an inch deeper than any of the other plants examined; and that some of the tops of the wheat plants had been eaten off and trodden down by accidental intrusion; a fact unregarded at the time. On the 26th day of September I examined another root, expecting to see the blade from below more perfectly developed; none however was discovered; but a third tier of roots was found at the surface of the ground, which proceeded from the second, as that had from the first system of roots. On the 16th day of October I placed some seed wheat about two inches in the ground; their delay in coming up induced me to suppose that they had perished from cold and wetness; but at the expiration of three weeks they made their appearance, and although the ground remained open several weeks longer, no second leaf appeared, of course no joint or second system of roots had been formed. The very different formations in the roots of wheat, which this experiment has disclosed, proceeded from causes appropriate and capable of being ascertained, but to distinguish them with certainty, other trials must be made and conducted with greater accuracy than the one of which an account has been given.

From these experiments, though inaccurate, some conclusions may perhaps be drawn of practical use. All plants, which live over winter

possess an apparatus, by which they supply themselves, in autumn, with food for their sustenance in spring—This food consists mostly of saccharine matter which is enclosed in a proper receptacle. When this receptacle is formed near the surface of the earth, the fermentation of its contents is excited by frequent changes of weather, the saccharine matter is decomposed, and the plant perishes from the want of food, and perhaps also from a rupture of its vessels.

All wheat, shallow sowed, must have its reservoirs of food but slightly covered with soil, and of course they are fully exposed.—When wheat is sown early at any depth, a second and sometimes, at least, a third system of roots is formed within an inch of the surface. In these many stems originate, each of which has its receptacle of nourishment at its base, and it is quite certain that in most instances, the food which was contained in the seed and the adjoining knot is entirely exhausted by the supplies of nourishment it affords the upper portions of the plant. The life of early sowed wheat must then, like that which is shallow sowed, depend upon the preservation of the reservoirs of saccharine matter which are placed at or near the surface of the ground, and of course exposed to the unfavorable action of variable weather during winter.

Wheat, which is late sowed, generates no second blade or new system of roots, and of course the nourishment for spring's use is retained in the receptacle which adjoins the seed. If then we sow sufficiently late in autumn, and place the seed deep in the soil, we shall provide every security against the hazards of bad weather which the nature of the case admits of.

In the ordinary course of husbandry, some of the wheat is necessarily deposited at considerable depth in the soil, and when this takes place sufficiently late in the season, the receptacle of food will be protected by its covering of earth, and a partial crop will often be realized; although there may be, when the spring opens, no signs of life on the surface of the field. In such cases as the destruction of the blade, which issues from the seed-roots in autumn, can be of little importance, one would suppose that the surviving plants would grow the more vigorously, from their being less in number, and, by tillering, produce many stems with large well filled ears; such however is not the fact; usually the stems are single and the heads are not large. To account for this, it must be recollected that after the ground has thawed in spring, the earth settles and often becomes so extremely hard that doubtless many plants die, in their struggle to overcome the opposing resistance, and the surprise is, that any should possess vigor enough to protrude even a single stem through the hard earth that covers it.

From this view of the subject, the practice may be recommended, of effectually harrowing the field in the spring after the ground has settled, in order to supply the plant with fresh air and give a free passage to its upward growth. After the harrow has been used, the roller ought to be employed to reset such roots as have been displaced and diminish the evaporation of moisture.

In England a wheat plant was taken up, separated into eighteen parts and replanted, and by successive divisions and replantations, a crop of three and one-third peck of wheat was obtained in less

than eighteen months from the time the seed was sown. If the roots of wheat can be so minutely divided and successfully replanted, there is little danger that the freest use of the harrow can be injurious, provided the roller be also used. The fact appears to be, that nothing is necessary to the vernal growth of the plant, but the preservation of the apparatus which contains the saccharine matter which is its proper vernal food, so that if the roots and top be cut off, and the bulb be planted in a genial soil, the plant will grow.

Notwithstanding the arguments which have been urged in favor of sowing wheat late, it must be conceded that, when early sown and our fields are cultivated in the usual manner, it produces the largest crop, if it survive the cold season. Whether such improvements may not be made, as to combine the benefits of a sure and large crop, is a question still open to investigation; the probability is, that both advantages may be secured, by a more correct knowledge of the proper time to sow, and of the best methods of culture.

In the first volume of the transactions of the society for the promotion of agriculture, arts and manufactures, instituted in the state of New-York, it is stated that, in Huntington, Suffolk county, fifty-two bushels of wheat had been raised by manure on an acre of land; and Mr. Downs is said to have raised on a poor gravelly dry soil, by the use of fish as a manure, at the rate of 128 bushels of rye an acre. In this case, the rye would doubtless have lodged and been of little value, were it not that it was twice eaten off by his neighbors' sheep which broke into the lot; once when the rye was nine inches high, and again when it was about six inches high.

[The production of so large a crop of wheat and of rye must have proceeded from causes which are steady and uniform in their operation, and if all the circumstances which had concurred to produce them, had been distinguished and noted down, similar crops might have been again raised. Some things which occurred during the cultivation of this rye crop, may be ascribed to accident or chance, so far as Mr. Downs' sagacity was concerned, but the causes which proximately occasioned the crop, did not work by accident or by chance, but agreeably to laws or rules from which they never deviate.—This uniformity of operation lays the foundation for making future discoveries, and brings within the grasp of our faculties the knowledge of increasing our crops by methods the least laborious and expensive.]

The period may arrive when the Farmer shall pursue his methods of culture with an anticipation of the consequences which will result, analagous to that of the mechanic in the construction of a machine, and when, by direct means, he shall procure greater crops than ever were obtained by mere empirical trials.

Time was when the greatest philosophers taught the doctrine, that all things pertaining to the surface of the earth were too irregular and too much under the governance of chance, to admit of scientific inquiry; this error has, within the two last centuries, been dispelled. But a similar error, in regard to rural affairs, is embraced by almost all our practical farmers, and the task of correcting and exposing it, is devolved it would seem, upon the unaided efforts of a few individuals. Here then is the difficulty.

A PRACTICAL FARMER.

A practical farmer whose livelihood depends upon his calling, should make it the pinnacle of his wordly ambition to excel in it. If he neglects his farm for any thing else, he is generally a loser both in interest and credit. Solomon, the wisest observer of men and things, tells us of his disgust at the sight of a slovenly farmer. 'I went by the field of the slothful—and lo! it was all grown over with thorns, and nettles had covered the face thereof, and the stone wall was all broken down.'

Owner where art thou? Perhaps dozing away thy time in slumber and sloth, or spending thy time at the tavern, or perhaps dreaming of promotion, or engaged in the business of some petty office. Better mind thy own proper business, else 'shall they poverty come as an armed man.' A farmer on the other hand, who keeps his land and his stock in excellent order, need not be ashamed even if Solomon himself were passing by. Every passing traveller, no sooner casts his eyes over such a farm, than he honours the proprietor in his heart. The proprietor, moreover, is sure to receive for his pains, something that is more solid than honour. A comfortable decent livelihood, for which he is indebted to Him only whose is the earth and the fulness thereof.

NEW SEED STORE.

The subscriber has just received a FRESH SUPPLY OF GRASS SEEDS, warranted to be genuine and fresh, suitable to the approaching season, such as

Timothy
Orchard
Herds or Red Top } GRASSES
Also, BUCKWHEAT for fall seeding, as an inlay, preparatory to the wheat crop.

TURNIP SEEDS, of different kinds and of the best quality. Farmers and Gardeners will find it to their advantage to call and supply themselves liberally of this seed, to supercede in some measure their loss occasioned by the drought. Also BIRD SEED of every kind.

☞ All orders by mail or otherwise, for CASH or good REFERENCES, will be faithfully and duly executed, with despatch. FARM and GARDEN TOOLS of all kinds on best terms, furnished by
THOMAS DENNY,
at 21 4t Grant street, near Pratt street.

TURNIP SEEDS.

5000 lbs. Turnip Seeds of first quality of the following kinds, will be supplied at the very lowest wholesale rates; which will enable venders to make large profits in selling by the pound, and far larger when selling in smaller parcels.

Purple topped Ruta baga or Yellow Swedish Turnip, White flat Field, White Norfolk, Early White Dutch, Yellow Dutch, Yellow Flat Field, Yellow Aberdeen, Large Yellow Bullock, Long Tankard, Yellow Stone, White Stone, Yellow Maltese, Dale's New Yellow Hybrid, Swan's Egg, Red top or Red Round, Green top or Green Round, and others.

Also, for sale, every other kind of Garden, Flower and Agricultural seeds. A liberal credit to venders—and priced catalogues will be sent to all who desire.

N. B. 600,000 Chinese Morus Multicaulis Trees, 3 to 6 feet high, deliverable in October—and 200,000 Morus Expansa, Brussa, and other choice varieties.

WM. PRINCE & SONS,
July 17 St Flushing, New-York.

CONTENTS OF THIS NUMBER.

A hint to editors—notice of an essay on manures—notice of accounts of the crops—do. of Hon. A. B. Allen's letter—vitality of turnip seed—mortality among cattle—accounts of the corn crop, &c. throughout the U. States—letter from Hon. A. B. Allen on cattle, &c.—effects of hydrophobia in a horse—relative value of manures—paper on the cultivation of wheat—a practical farmer—prices current—advertisements.

Applications for him to be made to the editor of this paper--all letters to be post paid. aug 14

THE FARMER & GARDENER

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, E. P. ROBERTS AND SAMUEL SANDS—EDITED BY E. P. ROBERTS.

No. 19.

BALTIMORE, MD. SEPT. 4, 1838.

Vol. V.

THIS publication is the successor of the late

AMERICAN FARMER,

and is published at the office, at the N. W. corner of Baltimore and North streets, over the Patriot office, at two DOLLARS AND FIFTY CENTS per annum, if paid within one month from the time of subscribing, or \$3 if after that time. All letters to be post paid.

BALTIMORE: TUESDAY, SEPT. 4, 1838.

The drought still continues in this quarter, and as far as we can learn extends over at least three-fifths of the states of the union, and it is but fair to infer that wherever it reaches, the crops of corn, potatoes, pumpkins, turnips and other roots, will be short. Such being the state of things we hope we will be excused for offering a few words of advice to our agricultural brethren. It will be obvious to all who will reflect upon the subject, that, although the crops of artificial grasses were good, owing to the deficiency in the yields of the products we have named, cattle feed must in the course of the approaching winter and spring be comparatively scarce in several of the states. Under such circumstances, it becomes important that whatever can be converted into provender, should be husbanded for that purpose. In England, in years of scarcity, many weeds which we look upon in the light of pests are cut down and made to contribute towards the support of the tenants of the barn-yard, and indeed, we have known some provident farmers in this country equally attentive to the comfort of their stock. The weed known as *Rag-weed*, which almost invariably springs up in the stubble-fields, if cut when in seed before it gets too tough, and cured properly, makes a food which is very readily eaten by cattle. The way to cure it is this. After it is cut down and remained long enough to become a little wilted, it should be thrown into small cocks, which should be turned and shaken out for two or three days in succession, when, if the weather be dry it may be packed away for winter use. In packing it, a peck and a half of salt to the ton should be strewed between the layers. When cured in this way, we speak practically when we say, that it makes a hay that is by no means unacceptable to cattle, and that although it is not as nutritious as timothy, clover, herds, orchard, or some other of the artificial varieties introduced into the hay culture, it answers an excellent purpose in appeasing hunger

and keeping stock fed on it in good heart, and is worth the expense and trouble of cutting and curing at any time, and especially so in seasons of scanty supply. Besides the benefit which the cattle would derive, any fields of young clover from which the rag-weed might be taken would be much benefited in the degree of exemption from weeds thereby ensured to its growth the ensuing season, and the value of the hay greatly enhanced.

We witnessed on Thursday last, the weighing of three of Mr. Beltzhoover's Durhams in the western hay-scales, and shall give a particular account of their respective weights next week. One of them, a yearling bull, was bought by a gentleman of Western Virginia, where we hope he will do much good.

Turnips—From present appearances but few turnips will be made this season. What with the grass-hoppers, turnip-flea and drought, they have either been cut off immediately on coming up, or the seed has perished in the ground, there not being moisture enough in the earth to excite germination.

The article on the subject of analyzing lime, and the application of it to various soils is full of interest to the ingenious agriculturist.

Grasshoppers—By the bye, this we think might emphatically be called the grass-hopper year, for beyond all comparison they are more numerous than we ever recollect to have seen them, and as destructive to vegetation as they are numerous—Corn, clover, turnips, cabbages, beets, and indeed every thing of a vegetable nature are indiscriminately subject to their attacks.

Preservation of Apples—The Massillon, Ohio, Gazette, of August 25th, contains the following paragraph, which we insert with the hope that our friend of the Gazette will procure from Mr. Earl a statement of his method of preserving apples.

APPLES—Mr. Gilbertharpe Earl, jr. treated us yesterday with a present as novel as it was interesting. It was a basket of magnificent apples—one half of last year's growth, and the other half of this. The yearlings were of that variety which in Pennsylvania were wont to be called *leather coats*. They are in a state of excellent preserva-

tion, and bid fair, if they escape the mouths of our youngsters, to last till next Christmas. The young apples, of the present generation, that accompanied them, are green, and remind us, by their flavor, of that early variety which, in our boyish days we were taught to call *codlings*. Mr. Earl has our most sincere thanks for this rich donation from the treasury of Pomona—may he never lack an apple to cheer him while he lives.

SOWING WHEAT.—The following communication, on the subject of sowing wheat, after the manner it details, is from the pen of an enterprising agriculturist of our country, and merits attention. If such abundant multiplication of the stocks and grain follow from giving more space in the planting, and the experiment detailed should be sustained by others, made under fair opportunities for testing the result, it must prove highly valuable to the farmers, both as to the saving of seed and the great increase of its production:

To the Editor of the Winchester Virginian.

Sir: Having read of a new mode of raising wheat in England, by dropping and covering two grains in small holes about one inch and a half deep and four inches apart—in this way I planted one hundred grains last fall, and found this harvest that every two grains had produced from 20 to 50 stalks. I rubbed out one bunch of thirty stalks, and found to my astonishment nine hundred grains of fine plump wheat, of that species called mountain sprout. In this way I do believe that one bushel may be made to produce five hundred.

A FARMER.

The *Agricultural Surveyor*, Mr. Colman, is now in Berkshire, finishing the Survey in that County which was begun the last fall. He will visit the old county of Hampshire this autumn. Farmers can do much to aid him in the discharge of his arduous and responsible duties, by frankness of reply and readiness to communicate in their intercourse with him. He goes familiarly among them to be instructed as well as to communicate something from his own inexhaustible fund of agricultural knowledge. "I know enough now about Farming," said rather a dogmatical agricultural friend to the Surveyor, "I don't want to be instructed." "Just the man I want to find," said he. "I want the benefit of your experience and observations to lay before our brother farmers for their instruction." Upon that our friend relaxed the muscles of his face and communicated much which was valuable to the Surveyor. We'll be bound to say, before they parted, that, although the Farmer knew so much, he began to perceive he could learn *something more!* The survey is invaluable to Massachusetts. It is based upon facts, and those facts are obtained with great caution, by a never-tiring observer. The results are

so surprising, that captious people are incredulous about some of the statements, but that incredulity dissipates before the light of truth, which Mr. Colman is ever ready to lay before them.—*Northampton Courier*.

From the Yankee Farmer.

DRAINING AND IRRIGATION.

The time is not far distant when much of our lowest lands now waste, the swamp, bogs, marshes, and miry places overflowed with water, will be reclaimed, and converted into the richest and most productive soils under cultivation. In some of the longest settled sections of the country, farmers are beginning to cultivate such lands, and find their profit in so doing. In the first settlement of the country, the elevated or high lands are first cleared. The soil being rendered fertile by the accumulation for ages of vegetable matter, the clearing and draining the low lands is generally postponed until the enhanced value of land, and the wants of an increasing population make it the farmer's interest to convert the dismal swamps into verdant fields. The next step, after clearing, is draining off the redundant waters.—This is often found to be more formidable in anticipation than in practice. By the aid of a water level, to determine the place of the greatest descent, an outlet may generally be made without great labour and expense. A considerable portion of many farms lies useless by being overflowed or too wet. We frequently perceive portions covered with various kinds of low bushes unfit for fuel. In the course of time the vegetable matter has been washed from the higher lands and hills, and deposited in the bogs, swamps and valleys below. This matter, in its decomposed state, constitutes the unctuous black loam or mud, mixed, more or less, with clay or sand. As it supplies the food, which plants require, these low lands, when reclaimed, are the richest parts of a farm. The potatoe flourishes best in such soils, when drained; and experience will probably prove that corn, wheat and various other kinds of vegetables may also be grown in low loamy soils to very great advantage. But draining would be profitable if for no other purpose than to enable the farmer to obtain a plentiful supply of mud to make the compost manure, in order to restore the fertility of his lands which have become exhausted by long cropping or otherwise. The small brooks and water-courses, often originating from living springs in the high parts of farms, overflow and render waste much land below, which otherwise would be valuable, and in their natural descent empty into the bogs, swamps, &c.

Our present purpose is to invite the attention of farmers to the subject of turning such water courses, in order to prevent the injury to the lands thus overflowed, and also to conduct the springs or brooks where they may do great benefit. What proportion of farms have the privilege of such springs we are unable to say; but farmers who have within their bounds may derive very great advantages from turning them. This may be done oftentimes with little labour and expense. A single furrow, made with the plough, beginning at the fountain head of a spring and continuing the furrow in a line nearly up to the water level of the fountain, will sometimes be sufficient to carry

a spring along by the side of a hill or swell to a considerable distance. Our practice has been to cut two furrows with the plough, clearing out the second with the hoe and spade; and we have met with good success in turning several springs, with little labour. We have thus caused boggy and miry places to become sufficiently dry for pasture or cultivation, and conducted the springs where they may be used for irrigation, and for watering the cattle at the barn-yard. Several hills of rising grounds intervening between the fountain and the yard, instead of cutting deep channels through in a straight line, the furrow was cut round the hills, in a serpentine course. Suppose, for instance, that the fountain head of a spring has an elevation of one foot above a distant cultivated field, and that a straight line between the fountain and the field would strike several hills or elevations higher than the fountain, lying between the fountain and the field to which the water is to be conducted—in such case, instead of cutting a passage through the hills or swells, it is only necessary to run the ditch round the same in a serpentine course, keeping the whole line of the ditch very nearly up to a water level with the fountain head of the spring. Although this is as simple as it is evident, it is not always thought of. In past times, our wise road-makers would cut the roads over the tops of hills, although the distance round the base would be the same.

Where water cannot be conducted, by its natural descent, in a ditch easily made, it may be conveyed by pipes, and carried over swells of land higher than the fountain head, provided the termination of the pipe, where it discharges, be lower than the fountain head. It is no mystery to make water "run up hill" by this method. Upon the same principle, liquids are drawn from a hog's-head by using a siphon. It is believed that should farmers turn their attention to their springs with a view to irrigation, they would derive great benefits. How many can be found, which with half a day's labour, can be turned from their natural courses into artificial channels, from which outlets may be made to moisten our mowing and cultivated fields in the dry season of the year?

Great attention is paid to the important subject of irrigation in England, although here it seems to be generally wholly neglected. There where water cannot be obtained at small expense, immense sums are expended. The fertilizing qualities of water in aid of vegetation, we need not attempt to explain. The fact that the farmer can get no products without it is sufficient for us to know. No one can doubt that our mowing fields would produce more abundantly by occasionally being moistened by artificial streams, or water-courses. Wherever the water course has the smallest elevation above the pastures or field, the latter may easily be moistened or overflowed, as occasion may require.

To make observations, and ascertain the points to which springs may be conducted, a water-level may generally be necessary. Instead of paying from five to ten dollars for such an instrument, any farmer may in a few minutes make one sufficiently correct for ordinary purposes. Take a narrow straight board, 3 or 4 feet long—plane down the centre a little to prevent the water running off at the sides—bore an augur hole at each end so as to admit two short sticks, the other ends

to be stuck into the ground—then pour water into the centre of the board until part of it runs off equally at each end—and take sight upon the water's surface. As water ever preserves its uniform level, other methods may easily be adopted to take water-levels with sufficient accuracy.

We have seen but few publications in our agricultural papers upon the subject of irrigation—and our hasty suggestions are not derived from scientific sources, but simply from common observation. They are simple enough certainly, and perhaps too much so for publication. But there are many simple facts pertaining to our farms which almost strike our sense without making any impression. A brook has been running during our lives in its natural course. The idea perhaps never occurs to us that by diverting its course we may increase the vegetable growth.—Sometimes we perceive in our portions and cultivated fields a spongy spot, covered with green, from which a little water oozes, perhaps out of a bed of clay. It seldom occurs to us that by digging down we may open a never failing spring. Two springs thus situated we accidentally discovered. Since removing several tons of clay and sand which obstructed the passage, there has been a copious effusion of the purest water. It is believed that by a little attention and observation many farmers may discover and open springs of great value.

We have merely glanced at the subject of irrigation. It requires the light of science to present it to us in its important points of view. Such light we may hope to receive through the medium of our agricultural papers.

W. CLAGGETT.

Portsmouth, June 26, 1838.

From the Farmers' Cabinet.

ROTATION OF CROPS.

System is as important in farming as any other business; without it, confusion, disorder, and loss, will be the inevitable result. Fifty years ago there was no regular, rational, systematic rotation of farming pursued in what are now called the best cultivated districts of Pennsylvania. The consequence was a regular and constant deterioration of the soil, producing less and less annually, till starvation and want seemed to be inevitable, in many sections of country, that are now in a very high state of cultivation. The introduction of red clover and plaster of paris, with a rotation of crops, gave rise to the astonishing improvements which have taken place within forty or fifty years. The soil gradually became enriched and regenerated under the improved system, and its increased products enabled its owners still further to add to its fertility; and how far this plan of progressive improvement is capable of being carried, has never yet, that I have ascertained, been determined; but many of us have lived to see farms that yielded a very scanty support to a single family, under the old way of cultivation, now not only support in affluence three, four, or five families, but furnish the means of enriching them all, by the adoption of the modern improvements in agriculture. Recently meeting with an intelligent farmer from the lower part of Delaware State, and falling into conversation with him on the subject of a proper rotation of crops, I was not

a little surprised to find that the system, which with us has enriched both the soil and its proprietor, should not have found its way into that part of our common country; but that the old plan of impoverishing the land and diminishing the resources of its owner should still, at so short a distance from us, be pursued to a very ruinous extent. At the particular request of my friend, who informed me that you had many subscribers in his vicinity; I consented to furnish for your Cabinet a statement of the rotation of crops, which is generally adopted by the best and most successful farmers in the best cultivated parts of eastern Pennsylvania.

After a grass or clover field has been mowed one year, and the next succeeding year been used for pasture, it is broken up or ploughed, either late in the following spring, and planted with Indian corn, which is cut off in the fall and the field ploughed as before, either in the fall or following spring, and sowed with oats or barley; and immediately after the harvesting of the oats or barley the ground is ploughed, manured, and sowed with wheat.

Grass seed should be sowed on the wheat early in the spring, and if timothy is intended to accompany the clover it had better be sowed in the fall, and the clover, orchard grass, or herd grass seed sowed early in the spring; and be sure not to be too sparing of the grass seed, for much loss is often sustained by not putting it on thick enough, particularly as the clover in some soils is often injured by the winter frosts, and then it is important to have plenty of timothy, orchard grass, or herd grass roots, to supply its place.

The spring following the wheat crop, plaster of paris should be applied, say one bushel to the acre; most of our best farmers consider this to produce as great an effect as any larger quantity. This season cut the grass or hay, and the next succeeding season pasture the grass, and in the autumn it may be again ploughed for corn the following season, and proceed with the same round of crops again in the same order; but if the farm should contain a sufficient number of fields, and the grass be well set, it may be pastured a second year before it is broken up for corn. The first is a five year rotation, the latter six.

The best time for applying lime or marl in this rotation of crops, is believed to be in the fall, after the wheat crop, applied as a top dressing on the young grass clover. In this mode of application its effects are very conspicuous in the increased quantity of grass the first season, and when the sward is broken up for corn, the effect of the lime or marl on that crop, will be much greater than if they were applied to it the same season.

AGRICOLA.

AN EXPERIMENTAL FARM IN FRANCE.

BY COLONEL LE COUTEUR.

It is situated in a beautiful and fertile country, well wooded and watered, but cultivated by the Breton farmers, just as their fathers tilled it two hundred years since. The college, or experimental farm, appears like a garden in a smiling wilderness, so far as culture goes. I rose at four in the morning, in order to witness the whole course of labor in this interesting institution.

There were from eighty to ninety students, under the superintendence and direction of a director, a professor of agriculture and agricultural chemistry, a veterinary surgeon, and an agricultural implement maker. At half-past four they took a slight repast, and as the clock struck five all were employed; some in harnessing the horses and oxen, others in carting out and properly disposing the implements in the field, others set to hoeing, others weeding, some ploughing, some hay making; in a word, all the various labors of the season.

The school is divided into working parties of ten; at the head of each is a steady young man of experience, called the "decurion," who directs the work of his party. In all difficult operations, a regular farming laborer is at hand to perform them; but such is the ardor and perseverance of the youths, that they rarely allow any difficulty to arrest their progress. The duty of one "decurion," or ten, is to dress, litter, and feed the cattle, with as much regularity as a cavalry corps dress their horses, also to keep the farm yard in order. Thus all, in turn, are made acquainted with every thing connected with a farm, whether in regard to horses, oxen, cows, pigs, or manures. These last are made and husbanded with the greatest care, the mixions being formed of sweepings, leaves, and weeds that had not seeded, in alternate layers with stable manure.

The drainings of the stables and straw yard run into a tank, to be pumped out when required as liquid manure, which is the best, most portable, but least known in this country.

The learned professor, M. Donku, who is an admirable practical farmer, as polite and communicative as he is learned, complained that he had not a sufficient quantity of manure. I urged him to burn the underwood and decaying timber of the large adjacent forests, through which wide roads were cut, which would enable him to obtain an inexhaustible supply of ashes, the best of all manures, either for turnips or wheat; the cartage of ashes being easy, and the quantity required to dress the land not being great; in which he entirely coincided.

At nine all came into their studies, when they write remarks on the various operations of the morning. From eleven to twelve is the breakfast hour. From twelve to three is the time for recreation and study, which embraces for the first class questions of the following nature: "H's farm of six hundred acres, one-eighth of which is always to be in beet-root, is to be divided into the most eligible rotation of crops; show the most profitable course, and describe the nature and the chemical properties of the soil in each field, the proper manures to be applied to them, the quantity of seed required for the crop, its culture by previous ploughings, by after hoeing or weeding, and the cost and labor, and the probable return?"

The plans of farming given by some of the youths would have done credit to an experienced farmer, and demonstrated clearly that, though theory alone in farming is an absurdity, the combination of the practice with scientific acquirements, will soon operate great melioration in the agricultural world. From three till seven they prosecute their labor in the fields, being 8 hours work in the day. They then come in for dinner. At eight the director receives the report from eve-

ry decurion, of the day's work of his party of ten. He then orders the work for the ensuing day, giving a concise lecture on the subject when necessary to the culture of any unusual crop. A library of agricultural works is open to the students till bedtime, quarter past nine. *** The crop that appeared to me to be most carefully cultivated, was beet-root in drills, which produced per acre about 750 pounds of sugar, selling at 10 pence per pound as fast as it could be manufactured.—*Cultivator*.

ON IMPROVEMENT OF WET MEADOWS.

[From Transactions of the Essex Agricultural Society.]

The Committee on Improving Wet Meadow and Swamp Lands, consisting of N. W. Hazen, A. T. Newhall, and Amos Shelden.

Have received upon the subject referred to them, the two communications which are annexed. These sufficiently attest the facility with which such improvements may be made, and the rich benefits which those may expect who undertake to prosecute them judiciously. The committee understood Mr. Dalrymple to state that the average cost of his meadow land, which is that spoken of in his statement, including the price which he paid for it, and all expenses of cultivation for the first crop, would not exceed \$25 00 per acre, and it appears, from the interesting narrative which he has furnished, that he obtained for the produce of a single acre in one year, the sum of \$100,50.

It is striking to reflect how many thousands have emigrated to the wilds of the West, leaving behind them New England, with all its social advantages, and thousands of *prairies* just like this discovered by Mr. Dalrymple, in the very centre nearly of the populous town of Lynn,—in pursuit of lands that will afford a profitable cultivation: quitting the homes and graves of their fathers with an indifference, which would sometimes seem to indicate that the cold calculations of interest had impaired the force of some of the better feelings of our natures, in pursuit of a cheaper and more fertile soil, which the same enterprise, better directed, would have taught them to find in the "Wet Meadows and Swamp Lands" of their own native farms. Add to the productiveness of Mr. Dalrymple's meadow the value which the high privileges of New England confer upon all the land situate within her borders, and he may safely challenge Illinois, and even the banks of the Red River, for an instance of cultivation equally profitable.

The example afforded by the experiment of Mr. French, is scarcely less valuable to be presented to the farming interest, than that of Mr. Dalrymple. It is upon a smaller scale, and such as a majority of the farms in the county probably afforded an opportunity for cultivation. And Mr. French further informs us, the necessary labor was done at intervals afforded by the other business of the arm.

It would not be easy, by any commentary, to add to the impressions which the statements of Messrs. Dalrymple and French cannot fail to make. Committee submit them without further remark.* They award the highest premium of twenty dollars to Orin Dalrymple, and the next of ten dollars to Moses French.

N. W. HAZEN, for the Committee.

December, 1837.

[*They are omitted in this publication.]

From the Cultivator.

MODE OF ANALYZING LIME,

AND INTERESTING FACTS IN RELATION TO ITS APPLICATION.

"In eastern Pennsylvania, lime is the great source of improvement; and of this we have all the different varieties, I suppose, that can be named. We want some plain simple rule, by which any farmer may analyze lime, and be able to judge which of the different kinds is most useful to agriculture. We have a primitive and secondary limestone, also that which contains large quantities of magnesia, which we find very injurious to vegetation, and which I should like to detect before using it. Send us rules, in the Cultivator, to try lime, and you will oblige yours, &c.

"BENJ. F. BAOLET.

"Pugstown, Chester county, May 25."

Before we reply to our correspondent, we cannot but repeat our regrets, that chemistry, so important in all the arts of productive labor, is not made a branch of instruction in the schools of farmers' boys, as it is in Germany, France, and elsewhere; and that we have no schools of instruction for them, in the theory and practice of husbandry, like those of Hoffwyl, Moegelin, Templemoyle,—of France, and of most of the German states. The benefits that would result alone from teaching the young farmer, scientifically, to determine the qualities of his soil, its defects, and the proper means of improving it by lime, marl and manures, would more than remunerate the public for twenty agricultural schools; or for suitable books of instruction in these matters, to every school in the nation. Science is almost indispensable to good and successful husbandry. See our extracts to-day. Orfila says—

"It is impossible to lay down any general rules respecting the fitness of lime for the purposes of agriculture, because much must depend upon the peculiarities of soil, exposure and other circumstances. Hence a species of lime may be extremely well adapted for one kind of land, and not for another. All that can be accomplished by chemical means, is to ascertain the degree of purity of the lime, and to infer, from this, to what kind of soil it is best adapted. Thus, a lime which contains much argillaceous earth, [clay] is better adapted than a purer one to dry and gravelly soils, and stiff clayey lands require a lime as free as possible from argillaceous ingredient.

"To determine the purity of lime, let a given weight be dissolved in diluted muriatic acid. Let a little excess of acid be added, that no portion may remain undissolved, owing to the deficiency of the solvent. Dilute with distilled water; let the insoluble part, if any, subside, and the clear liquor be decanted. Wash the sediment with farther portions of water, and pour it upon a filter, previously weighed. Dry the filter, and ascertain its increase of weight, which will indicate how much insoluble matter the quantity of lime submitted to experiment contained. It is easy to judge, by the external qualities of the insoluble portion, whether argillaceous earth abounds in the composition."

The diluted muriatic acid dissolves the lime—The insoluble residuum is clay or sand.

To detect magnesia in limestone, which, ac-

cording to Tennant, renders the lime, when applied in large doses, prejudicial to lands, Orfila directs as follows:

"Procure a Florence flask, [a common half pint olive oil flask,] clean it well from oil, by a little soap-lees or salt of tartar and quick-lime mixed, and break it off about the middle of the body, by setting fire to a string tied round it, and moistened with oil [spirits] of turpentine. Into the bottom part of the flask, put 100 grains of the lime, or lime-stone, and pour on it, by degrees, half an ounce of strong sulphuric acid. On each effusion of acid, a violent effervescence will ensue; when this ceases, stir the acid and lime together, with a glass tube or rod, and place the flask in an iron pan filled with sand. Set it over the fire, and continue the heat till the mass is quite dry. Scrape off the dry mass, weigh it, and put into a wine-glass, which may be filled up with water. Stir the mixture, and when it has stood half an hour, pour the whole on a filtering paper, placed on a funnel and previously weighed. Wash the insoluble part with water, as it lies on the filter, and add the washings to the filtered liquor. To this solution add half an ounce of salt of tartar in water, when, if magnesia be present, a very copious white sediment will ensue; if lime only, merely a slight milkiness. In the former case, heat the liquor by setting it in a tea-cup near the fire; let the sediment subside; pour off the clear liquor, which may be thrown away, and wash the white powder repeatedly with warm water. Then pour it on a filter of paper, the weight of which is known, dry it and weigh. The result, if the lime stone has been submitted to experiment, shows how much carbonate of magnesia was contained in the original stone; or, deducting 50 per cent., how much pure magnesia 100 parts of the lime contained. If the burnt lime has been used, deduct from the weight of the precipitate 60 per cent., and the remainder will give the weight of the magnesia in each of the 100 grains of burnt lime."

The sulphuric acid dissolves the lime and magnesia, which pass through the first filter with the liquid. The salt of tartar precipitates the magnesia, leaving the lime in the liquid. The magnesia is the residuum upon the second filter.

We add some relevant facts in regard to lime, from the Domestic Encyclopædia.

In burning lime, a ton ought to be reduced in the kiln to 1100 weight; otherwise it is not sufficiently burnt. It will regain two-thirds of the lost weight, by exposure to air for a week or ten days—100 parts of lime absorb (and solidify) about 28 parts of water; and to regain its full proportion of air from the atmosphere, it requires a year or more, if not purposely spread out. All limestone of primitive formation, contains magnesia; all white marbles contain about ten per cent. of magnesia. Put less of the magnesia lime upon your land, by about one-third, than of common lime.

The lands most benefitted by lime, are, 1. Rich black or brown friable crumbling loams, which abound with vegetable matter. 2. Low, rich drained meadows, that have formerly been bogs, and the black soil of which abounds in vegetable fibre. 3. Old pastures and commons, which have been under grass for time immemorial, and are first to be converted into arable land; but upon these, lime should not be repeated. 4.

On moory, boggy, mountainous land, and on black peat earth. 5. On all other waste soils that have been overrun with fern, briars, bushes or wood, and which, though richly stored with vegetable food, have contracted an acidity, in consequence of their long rest, and the spontaneous growth of roots.

Mild lime, carbonate of lime, and marl, improve the texture of clays and sands, rendering the first less stiff and adhesive, and the latter more compact and retentive of moisture; and they improve all soils, not already charged with calcareous matter, by fitting them better to hold manures, and constituting a necessary constituent of most plants.

The soils which are not benefitted by quicklime, are those which are poor, light and thin; those destitute of inert vegetable matter; strong stony lands; wet cold loams, and all lands which have not been sufficiently drained; and on stiff clays that are tenacious of moisture. Lime is only a manure of stimulus—not of nutriment.

THE CORN CROP, &c.

The weather, since the publication of our last notice, has continued dry and sultry. During the whole of the past week we have not had in this city or its immediate vicinity, a single drop of rain. The farmers and gardeners cry aloud and bewail their losses. Vegetables and fruit (all, except water-melons, which the dry season seems rather to have improved than injured,) are small, scanty, and shrivelled. Potatoes are especially scarce and dear. Corn is almost destroyed; and it is to be feared that rain can now do no service to thousands of acres which are rendered unproductive by the drought—the almost universal drought. We have no verdant fields around us to walk into or look upon. Our broad avenues and streets are inches deep with dust. Whichever way we turn our eyes, all is parched up with the extreme heat and drought. Happy are those who can retire from the piping hot streets of the city, to partake of the pleasures of sea-breezes and sea-bathing.—*Nat. Intel.*

The drought which has for many weeks withered and dried up all vegetation within this District and the surrounding country, still continues unrelieved and unabated. It is destructive to the autumnal crops and to the gardener's hopes and labors, but, as far as we have heard, is far from unfavorable to the general health of the country.

Whilst, however, this neighborhood continues to suffer from the unprecedented drought, it gives us pleasure to learn that both up and down the country there have been copious showers, though of limited extent, and therefore partial benefit, within the last week.—*ib. of Sept. 1.*

The corn crop in this county, it is thought, will be an almost total failure from the long drought which has prevailed. Gardens have been burnt up by the heat and a great scarcity of all kinds of vegetables and of pasture prevails.

We are happy, however, to learn from a farmer of experience and intelligence from Charles county, that there is a prospect of as large a corn crop as has ever been made, in the lower counties of this state, and that rains have been there quite abundant.—*Fred. Herald.*

Our information from almost every direction re-

presents the dry weather and heat as oppressive as well east of the mountains as in the Mississippi valley. The crops of small grain have been fine, and well saved, but all the summer crops will be short. In this neighborhood we have recently had some pleasant showers.—*Zanesville, O. Gaz.*

The Peoria (Illinois) Register of the 4th inst. says: The small grain is chiefly harvested, and turns out nearly a full crop. Of corn, our settlers say the prospect never looked better. The prairies will turn out from 60 to 75 bushels to the acre.

The Boston Patriot of Saturday says: We had a light rain on Thursday, and copious showers during the succeeding night. These rains apparently extended to a considerable distance. It began to rain at New York on Thursday afternoon.

The Maysville (Ky.) Advocate of Friday, says: "We had a most grateful and refreshing rain on Wednesday evening last, which was welcome alike to the citizens both of town and country; for while the crops of the farmer were suffering from the drought, we in the city were nearly suffocated with the clouds of dust with which our streets were almost constantly filled.

The New Lisbon (Ohio) Palladium of the 17th says: On Friday last, and several days since, we had most refreshing showers, and the weather from being oppressively warm, has become delightfully pleasant and bracing.

The Corn Crop—Some of the Baltimore papers assert that less than a fifteenth part of the usual corn crop will be made this year. It will be bad enough, but we think that this is rather below the mark. Some farmers, it is true, have cut down the stocks in order to save them as fodder from the further ravages of the grasshoppers, and other fields might be subjected to a similar operation—But at the same time, the following extract from the Williamsport Banner, may we think be also applied to Frederick county.

"We are gratified to hear, that in some, though limited districts of our county, the corn crop will afford a fair average yield, in consequence of some showers with which the greater portion was not favored. There is also a considerable quantity of the former crop on hand, insuring to us a supply."

During a recent excursion in this county, we noticed a number of fields in which was an average of one ear to the stalk, and that ear apparently a good one. The late rains have certainly not been altogether without benefit.—*Fred. Exam.*

The effect of the recent showers is visible upon a few fields of corn not so forward as the great portion of the crop, but the large majority of them have not been benefited the least.—*Fred. Citizen.*

Tall Corn—We measured a stalk of this grain, growing upon our sand hills, which was 14 feet from the ground to the top of the tassel, and of symmetrical diameter. We think this stalk, and there were others nearly as tall beside it, will *saw off quite short* the product of much more pretending soils we could mention—ours is very uncommon sand!—*Wilmington, N. C. Adv.*

While the upper part of our state is suffering from drought, and the hopes of the husbandman are at zero, this immediate neighborhood has been highly favoured with good seasons. A gentle-

man, by the cars, informed us that he had seen the finest prospects of a crop between Halifax and Wilmington that had come under his observation between New York and the latter place.—*ib.*

The Corn Crop—We have made enquiry of a number of the farmers of this county within a few days past, in relation to the extent of injury done to the corn by the late and unprecedented drought, and we are pleased to learn that the consequences are not so alarming as we had reason to suppose. From the information which we have received, we have no hesitation in saying that the alarm created by the *croakers* is without any foundation, and that the crop will be a very good if not an average one.—*Del. Gazette.*

The Crops in the West—The intelligent editor of the Cincinnati Gazette, writes from Wheeling under date of the 16th:

The wheat is not of the best quality. Most of it is light in the grain, as if the sudden and severe hot sun that had ripened it for the harvest and hastened its preparation, and operated upon it like a kiln-drying process. Whatever may be the cause it is certainly light.

The oat crop is rather inferior. It was affected by the first hot weather of the season, and further injured by the grasshoppers, myriads of which have overspread this part of the country for some weeks. Oats are steady in demand, at unusual prices, for the period of the year.

Much is said of injury to the corn and potatoes by the drought. The first has really suffered little, in the districts hereabouts. It is not now planted, except in the best lands, and in comparative small quantities. Wherever it has been properly cultivated, there is a fair crop. The price given for wheat within the last three or four years has wrought great change in the agricultural business of the country. Wool has been dull and heavy, and a consequent reduction has followed in the estimation and value of sheep. The distillation of grain is totally suspended, nay, in appearance, there is an end to that disposition of grains.

The potato crop is of very poor promise. But I presume the recent rains will renovate it. Such at least is the hopes of the cultivator.

The Corn Crop—On looking over our exchange papers, we find that their statements are quite contradictory, in relation to the probable average of the corn crop. This is natural; as the crop has been differently affected in different sections of the country. One intelligent contemporary expresses the opinion that it will prove less than the fifteenth of an average crop; while another, in an adjoining State, thinks it will prove about half an average crop. With such contradictory views, it is almost impossible to form an opinion. In Maryland, New Jersey and the eastern section of Pennsylvania, the crop will no doubt prove exceedingly poor, while in the New England States, and in the South and Southwest, the prospect is by no means so discouraging. Even in the vicinity of Philadelphia, there are exceptions to the general rule. On Saturday last, we conversed with an intelligent farmer who resides in the neighborhood of Frankford, and whose corn is represented as excellent. Doubtless the effect of the drought is bad enough; but we indulge a hope that the corn generally, taking one State with another throughout the Union, will prove fully equal to one third

of an average crop. For one thing, we have at least cause to be grateful. The wheat crop and the early hay were both abundant; while the rye was tolerable, all things considered. The prospect regarding potatoes is particularly bad; but here also, we trust that our New England friends will be able to make up the deficiency.—*Philadelphia Inquirer.*

The Crops—It is pleasant to hear that the late refreshing rains have not been without their good effects on the Corn crop, suffering as it has done from previous destructive drought. The Williamsport (Md.) Banner of Saturday says:

"We are gratified to hear, that in some, though limited districts of our country, the corn crop will afford a fair average yield, in consequence of some showers with which the greater portion was not favored. There is also a considerable quantity of the former crop on hand, insuring to us a supply. Under the unfavorable prospect of the drought, the price will no doubt keep up, but we have no reason to dread a scarcity of this essential and valuable article of consumption.

Corn in Missouri—The crops in this state (says the Cincinnati Republican) are yielding an unusually large product this season, according to the various accounts received from there. The Boonsville Emigrant states that a gentleman residing in Boon county, planted fifty acres, from which he will get from five to six hundred barrels of corn, say from fifteen to eighteen hundred bushels. This is an average of thirty-three or thirty four bushels per acre.

The rice crops in our vicinity promise fairly, and although a little rain would be of service to them, we cannot complain. We sincerely wish as much could be said in favor of the provision and cotton crops—the former has suffered severely, and we fear has sustained serious and lasting injury from the dry weather. As to the cotton crop the fine prospects presented to the Planter a fortnight since are over clouded, and unless the weather relents and bursts into tears, in plain English, unless it rains, and that at an early period, there is no telling the extent of the injury which will be received from the drought.—*Savannah Georgian.*

Macon, August 10.
"I remarked to you some time since that the present growing crop of cotton looked well.—Since that time a continued drought, with unusual hot weather, has much injured the prospect, and is now daily doing so. The corn crop is also much shortened within the last twenty days."

The Crops in Virginia—The drought still continues and every living vegetable is fast sickening and decaying. We hear from experienced and old farmers that such a drought never occurred before within their memory.

We make the following extracts from the Richmond Enquirer of Tuesday:—

The drought still rages in all its desolation. We have accounts from the counties on the south side of the James river—from this city to the mountains—from Fauquier to Fredericksburg; and with a few exceptions, they present a gloomy prospect of the corn crop.

We have seen a letter from Buckingham, 14th inst. which says, that "To keep man and beast alive, we shall have to prepare almost wood for mastication to carry us through the coming win-

ter. Such a drought, I suppose, has never been seen in this country; and its effect has been truly distressing, leaving not more than one-fourth of the usual crop of corn, and the tobacco crop equally unpromising—the grass of the fields parched up, and the stock unusually lean.”

The Fincastle (Botetourt) Democrat of the 10th says, that “the crop will be very short; not more than the fourth of a crop can be made in some parts of the country. We have seen some fields that looked exceedingly promising a few weeks since, nearly burnt up—in other parts of the country they have had partial showers, and will probably make half a crop. The pastures also burnt up.”

The Warrenton (Fauquier) Times of the 25th states, that “The drought still continues with unabated severity, and as we said before, our corn is irretrievably lost. Our best lands will not yield a fourth of their wonted crops, and our middling and inferior lands in truth are *little or nothing*. It is idle to believe that our wheat and rye crops can supply the defect thus created. The distress it will occasion among the laboring class, we fear, will be extreme, as breadstuffs must become very high, in fact almost reach the prices of 1816. Another consequence of the drought will be to keep out of market a very large number of beef cattle, as our pastures are literally parched up, and incapable of fattening them. At this time the mercury is at 92 degrees, and as we have had but two rains, and those slight, for seven or eight weeks, with the mercury ranging, with few exceptions in that time, from 90 to 97 degrees, some idea may be formed of the state of both pastures and crops, and the probable loss to the beef market.”

The Crops.—In this section of the country, scarcely half an average crop of Corn will be realized. The Oats too has generally fallen short of an average crop, and of Buckwheat, we are told, there will be none worth gathering. Of potatoes and other vegetables, there will also be a great scarcity. Wheat is the great staple of which our farmers have secured a good crop this year. Whilst the drought has deprived them of others, it afforded them the opportunity of gathering in safety that of which they are blessed with an abundant supply. —Cumberland (Md.) Civilian.

MICHIGAN FLOUR.—The rapid settlement of this young member of the National Confederacy by an industrious population, is already drawing from her fertile soil a greater amount of breadstuffs than is required for domestic consumption. The Detroit Advertiser of Tuesday last says: “Michigan begins to export in earnest. Already a large amount of flour has been sent down the lake, and it comes in upon us from the country every hour in the day. Among other shipments, one of our prominent flour dealing firms sold and shipped on Tuesday last, on account of a New York firm, one hundred barrels from the Ann Arbor, York, and Saline mills, of Washtenaw county. The same company have made arrangements to ship flour largely this fall. Every citizen of Michigan will look upon this as a bright era in her agricultural history.”

Affectation in wisdom often prevents our becoming wise.

DESTRUCTION OF THE CURCULIO.

[FROM THE NEW-ENGLAND FARMER.]

Messrs. Editors: For the following successful mode of destroying the Curculio, I am indebted to my respected friend Dr. Joel Barnett, of Southboro', a gentleman eminently distinguished for science and practical observation. I hope others may be induced to try the experiment and with the like successful results.

In insulated situations, as in cities and in places surrounded by salt marshes, the plum and other smooth skinned fruits usually bear large and very abundant crops. But it is not thus in the open country, where it is well known, that a great proportion of the fruits of the Plum, and the Nectarine and the Apricot are extremely liable to be destroyed by the attacks of the Curculio, and from this cause prematurely fall to the ground.

The Curculio is extremely partial to the smooth skinned fruits. The cherry though equally obnoxious to the attacks of this insect, usually in a great measure escapes, owing to no other cause than the incredible number of its fruits.

It is well known that the egg which the curculio deposits in the fruit becomes in process of time a worm, which causes a great part of the fruits to fall. Soon after its fall, the worm quits the fruit, descending into the earth. Early in spring, and about the time the fruit is forming, the Curculio arises from its early bed, a winged insect. Yet though having wings, it has been observed that they rarely use them. After entering their new element and remaining on the surface of the earth for a time, they ascend the tree, and in a few days they puncture and deposit an egg, in many cases, in every fruit.

The motions of the Curculio are very quick; to observe them requires very narrow and close inspection, as they avoid the face of man, suddenly dodging to the opposite side of the leaf or limb.

Dr. Barnett informed me a few days since, that he had a fine tree of the Princes Imperial Gage Plum. This variety, although naturally one of the most valuable and productive of all Plums, yet never would produce a crop of fruit on his grounds, on account of the abundance of the Curculios, but by adopting the following expedient, a most bountiful crop was produced during the last season.

Early in the spring, or as soon as the tree was in bloom, a hencoop containing a hen and an early brood of chickens, was placed beneath the tree. After the Curculios had arisen from the earth, and before they were prepared to ascend the tree, every one of them, as it appears, were devoured by the brood; and owing to this circumstance and to no other cause, the tree ripened and matured a most extraordinary crop of fruit.

WILLIAM KENRICK.

Nonanton Hill, Newton, April 10, 1838.

PRESERVATION OF APPLES.

The following practical observations, contained in a letter from Noah Webster, Esq., have been published in the Massachusetts Agricultural Repository:

It is the practice with some persons to pick apples in October, and first spread them on the floor of an upper room. This practice is said to render apples more durable, by drying them. But

I can affirm this to be a mistake. Apples, after remaining on trees as long as safety from the frost will admit, should be taken directly from trees to close casks, and kept dry and cool as possible. If suffered to lie on the floor for weeks, they wither and lose their flavor, without acquiring an additional durability. The best mode of preserving apples for spring use, I have found to be the putting of them in dry sand as soon as picked. For this purpose dry sand in the heat of summer, and late in October put down the apples in layers, with a covering of sand upon each layer. The singular advantages of this mode of treatment are these: 1st, The sand keeps the apples from the air, which is essential to their preservation. 2d, The sand checks the evaporation of the apples, thus preserving in them their full flavor—at the same time any moisture yielded by the apples, (and some there will be) is absorbed by the sand, so that the apples are kept dry, and all mustiness is prevented. My pippins in May and June are as fresh as when first picked, even the ends of the stem looked as if just separated from the twig.

WORKING DRESS FOR FARMERS.

Every person should be clad in a dress adapted to his occupation or calling; this indicates sound judgment and good taste, and enables a family to have a good many stray dollars in the course of the year. In our country but little attention has been paid to this important matter, and much unnecessary expense is annually incurred for want of adopting a cheap and simple costume for a working dress, which we should not be afraid of having dirtied or injured by the business we are engaged in, and which can be quickly put on or off, as occasion may require. In France, where convenience and economy has been studied by the agriculturist, there is a particular dress worn, which contributes much to comfort, and has a very neat and pleasing appearance. It much resembles what is called the “hunting shirt” in this country, is made for summer wear of unbleached linen, comes half way down to the knees, has a breast pocket on each side with buttons, and an open slit in the seam on each side of the pantaloons pockets, to give ready access to them; the collar fastened with a hook and eye, and two buttons close to the bosom slit. Around the waist is a belt either of the same material or of leather, buckled in front.

This dress, which in France is called “Blouse,” is cheap, light, cool, convenient, tidy, good looking and tasty, and consequently every way adapted to the every day business of the farmer and gardener, and ought to be worn by men and boys when engaged in their daily work, to the exclusion of the inappropriate and inconvenient dresses with which many are attired.

We ought to have said some days since that Capt. Crocker, well and favorably known in this city, has left with us a circular, setting forth the importance of establishing a company for the purpose of building a powerful steam vessel for towing vessels to sea, cutting through the ice, and supplying vessels on the coast in bad weather. The plan now proposed is his own, and for which he has obtained a patent. There can be no doubt of the great importance of the object, and judging from the opinions expressed in its favor by all

our most respectable ship masters, engineers and ship builders, we doubt not the practicability and usefulness of Capt. Crocker's plan. We hope it will be adopted.—*N. Y. Gazette.*

COTTON TRADE OF NEW ORLEANS.

The New Orleans Bee of the 4th instant states that the exports of Cotton from that port up to that date are 710,130 bales against 575,438 to the same period last season, making an excess of 134,692 bales, and 113,350 over the whole of last season. The stock now on hand on ship board not cleared is about 33,000 bales.

The Exports stand thus, viz:

	bales.
Excess to Great Britain,	127,029
Short to France,	5,327
North of Europe	820
Cowes and a market	2,172
Other Foreign ports	1,034
	9,353
Excess to Foreign ports	117,866
Excess Coastwise	17,006
	134,692
Total last season,	596,680
To present time this season,	710,130
	113,350

Rain—We learn from the Richmond papers of yesterday, that there was a copious and refreshing fall of rain in that region on Tuesday night and Wednesday morning. The Compiler says: "The clouds were lowering and threatening us with a rain all Tuesday evening, but so often have we of late been deceived by such premonitory appearances, that we little calculated on rain, further than a bare sprinkle. About midnight, however, it poured down as if every vessel in the upper regions was suddenly emptied of its long accumulating contents."

BEES.—A glass globe, containing 16 lbs. of honey, made in four weeks by a hive of bees in the garden of Andrew P. Young, of Boston, has lately attracted much notice. The regular formation of the comb, its clear color, and the pure honey, show to good advantage through the glass. The globe was filled in the following manner: A small hole was cut in the wooden hive, and a common fish globe, inverted, placed over the aperture. The bees immediately ascended from the hive into the globe, commenced operations; in the course of four weeks, as before stated, it was filled and taken away, without any inconvenience to the bees, or trouble to the owner. This mode of taking the honey from the bees, though not altogether new in principle, is certainly a beautiful improvement from the plan generally adopted.—*Advocate.*

A new periodical publication has been commenced in Philadelphia, under the title of "The American Silk Grower," edited by Ward Chesney and Brothers, of Burlington, New Jersey. The great interest at present claimed by the culture of silk in this country, renders it probable that a work of the above description, which is much

wanted, will meet with extensive patronage. The success hitherto attendant on the manufacture of this valuable article, induces the belief that at no distant period it will be one of our staple commodities; and it becomes the duty of all who feel an interest in the important subject, to gather information respecting it from every available source. American industry has been too long tributary to foreign nations for a product, the beauty and costliness of which has served to enrich foreign producers, who in fact possess no advantages over those of our own people, either with reference to the food on which the worms live, or to climate, so far as their healthful existence is concerned. The hills of Maryland, at present unproductive, only require to be planted with the mulberry to become immensely valuable to their possessors, and we hope that our agriculturists will devote to the subject the attention it deserves.—*Balt. Am.*

Fire in the Pines.—A great conflagration is now sweeping through the New Jersey pines, and the extreme dryness of the timber fearfully augments it. It broke out, as we learn from the Burlington Herald, in that county, on the Martha Furnace tract. While on Long beach, last week, the editor saw the destroying element, at the distance of many miles, casting a light as though a city were in flames.—Owners of timber lands are busily employed firing against the consuming enemy. It is the greatest calamity of the kind ever known there. From the neighborhood of Tuckerton to Burr's Mill, the country has been over run. The loss is at least \$100,000. We learn from another source, that one single proprietor has lost \$20,000. The fire sweeps on, in its devastating progress, in a broad column, twelve miles wide. It sports with man, too, even as with the dry twigs, consumes whole families, in its course.

Peaches—There has been an abundance of fine peaches brought to our market this season, and are now so plenty that they are selling about the streets at 50 cents per bushel. We see our brother editors in Charleston have been presented with some fine peaches lately, weighing *seven and a half ounces*, and of delicious flavor. We hope they will say nothing more about their peaches, when we inform them, that we saw purchased in our market last week, an Indian peach, that would make the mouth water to look at—measuring twelve inches and a half round, *weighing fourteen and a half ounces*, and, we understand, of delicious flavor.—*Augusta (Geo.) Const.*

NEW SEED STORE.

The subscriber has just received a FRESH SUPPLY OF GRASS SEEDS, warranted to be genuine and fresh, suitable to the approaching season, such as

Timothy
Orchard
Herds or Red Top } GRASSES
Also, BUCKWHEAT for fall seeding, as an inlay, preparatory to the wheat crop.

TURNIP SEEDS, of different kinds and of the best quality. Farmers and Gardeners will find it to their advantage to call and supply themselves liberally of this seed, to supersede in some measure their loss occasioned by the drought. Also BIRD SEED of every kind.

All orders by mail or otherwise, for cash or good REFERENCES, will be faithfully and duly executed, with despatch. FARM and GARDEN TOOLS of all kinds on best terms, furnished by
THOMAS DENNY,
au 21 4t Grant street, near Pratt street.

FARMERS' REPOSITORY OF AGRICULTURAL IMPLEMENTS AND EASTMAN'S CYLINDRICAL STRAW CUTTERS IMPROVED.

THE Subscriber informs the public that he has secured by letters patent his late and very important improvements on his Cylindrical Straw Cutter, by which improvements they are made more durable and easier kept in order. All the machinery being secured to an iron frame the shrinkage, wear and decay of wood is avoided. The feeding part of his improved machine is upon an entire different principle from the former machine; far more durable, requiring neither skill or care to keep it in order. These machines are so constructed as to make the freight on them less than half what it cost to ship the former or wood machines, an important desideratum to purchasers living at a distance; and I now offer it to the public upon the credit of my establishment as the most perfect machine in existence for the same purpose. They are also adapted to cutting rags for paper making, and for cutting tobacco as manufactured by Tobacconists, &c.

I also keep these machines on hand made as heretofore with my new feeding machinery attached to them; and also a general assortment of Agricultural Implements, as usual. Elliott's Horizontal Wheat Fans, and Fox & Borland's Threshing Machines are both superior articles.

My stock of Ploughs on hand are not equalled in this city either for quality, quantity, or variety. I have a large assortment of Plough Castings at retail or by the ton, and having an Iron Foundry attached to my establishment can furnish any kind of Plough or Machine Castings on reasonable terms and at a short notice.

All repairs done with punctuality and neatness. On hand, a few Patent Lime Spreaders, Horse Powers, &c. &c.

Also just received, a fresh supply of Landreth's superior Garden Seeds. In store, superior Timothy and Orchard Grass Seed and Seed Oats. All implements in the agricultural line will be furnished by the subscriber, as good and on as reasonable terms as can be had in this city, with a liberal deduction to wholesale purchasers. Likewise will receive orders for Fruit Trees from Mr. S. Reeves' Nursery, New Jersey.

JONATHAN S. EASTMAN,

Pratt street, Baltimore,

Between Charles & Hanover sts

Feb 20

A DURHAM BULL.

For sale, a superior Bull—he is of fine size and unexceptionable pedigree, which will be given next week—he comes from a strain of deep milkers, and is himself the sire of several fine animals. Price \$500. je 26 3t

THE AMERICAN FARMER.

The proprietors of this paper have a few complete sets of this work on hand, which they will dispose of at the reduced price of \$50 a set.—They are half bound and comprise each 15 volumes. The American Farmer, it will be recollected, was the pioneer in agricultural improvement in this country, being established in 1819 by John S. Skinner, Esq., to whose talents and industry its pages are indebted for, perhaps, the most valuable collection of agricultural matter to be found in any work extant. Those who desire to possess themselves of this valuable work will make early application as the number for sale is very limited.

CONTENTS OF THIS NUMBER.

Hints relative to provender—weight of three Durhams—injury of the turnip crop—notice of an essay on analyzing lime—grasshoppers—preservation of apples—new method of sowing wheat—notice of the Massa. Agricultural Surveyor—on draining and irrigation—on rotation of crops—experimental farm in France—improvement of wet meadows—mode of analyzing lime—the corn crop, weather, &c.—Michigan flour—maxim—destruction of the curculio—preservation of apples—working dress for farmers—ice-breaker, &c. in New York—cotton trade of New Orleans—rain in Richmond—bees—new periodical on the culture of silk—fire in the pines of N. Jersey—fine peaches—advertisements—prices current.

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every Monday

	PER	FROM	TO
BEANS, white field,	bushel.	1 25	
CATTLE, on the hoof,	100lbs	6 00	7 50
CORN, yellow	bushel	88	90
White	"	84	85
COTTON, Virginia,	pound	9	11
North Carolina,	"	9 1	11
Updand,	"	9 1	11
Louisiana—Alabama	"	11 1	12
FEATHERS,	pound.	45	50
FLAXSEED,	bushel.	1 12	
FLOUR & MEAL—Best wh. wh't fam.	barrel.		
Do. do. baker's	"		
SuperHow. st. from stores	"	7 12	7 25
" wagon price,	"	6 75	
City Mills, super.	"		7 37
" extra	"	7 75	
Susquehanna,	"		
Rye,	"	4 50	4 75
Kiln-dried Meal, in hhds.	hhd.	19	
do. in bbls.	bbl.	4	
GRASS SEEDS, wholes. red Clover,	bushel.		
Kentucky blue	"	2 50	3 00
Timothy (herds of the north)	"	2 25	2 50
Orchard,	"	2 00	2 50
Tall meadow Oat,	"		3 00
Herds, or red top,	"	90	1 00
HAY, in bulk,	ton.	12 00	16 00
HEMP, country, dew rotted,	pound.	6	7
" water rotted,	"	7	
HOGS, on the hoof,	100lb.	6 75	7 00
Slaughtered,	"		
HOPS—first sort,	pound.	9	
second,	"	7	
refuse,	"	5	
LINE,	bushel.	32	33
MUSTARD SEED, Domestic, —; blk.	"	3 50	4 00
OATS,	"	34	35
PEAS, red eye,	bushel.		1 12
Black eye,	"	1 00	1 12
Lady,	"		
PLASTER PARIS, in the stone, cargo,	ton.	3 87	6 00
Ground,	barrel.	1 50	
PALMA CHRISTA BEAN,	bushel.		
RAGS,	pound.	3	4
RYE,	bushel.	75	85
Susquehanna,	"		none
Tobacco, crop, common,	100lbs	4 00	4 50
" brown and red,	"	4 00	6 00
" fine red,	"	5 00	8 00
" wrappery, suitable	"		
for segars,	"	10 00	20 00
" yellow and red,	"	8 00	10 00
" good yellow,	"	8 00	12 00
" fine yellow,	"	12 00	16 00
Seconds, as in quality,	"		
" ground leaf,	"		
Virginia,	"	4 50	6 00
Rappahannock,	"		
Kentucky,	"	5 00	8 00
WHEAT, white,	bushel.	1 48	1 55
Red, best	"	1 43	1 47
Maryland	"	1 35	1 45
WHISKEY, 1st pf. in bbls.	gallon.	31 1	32 1
" in hhds.	"	31	
" wagon price,	"	bbls	
WAGON FREIGHTS, to Pittsburgh,	100lbs	2 25	
To Wheeling,	"	2 50	
Wool, Prime & Saxon Fleeces,	pound.	40 to 50	20 22
Full Merino,	"	35	40 18 20
Three fourths Merino,	"	30	35 18 20
One half do.	"	25	30 18 20
Common & one fourth Meri.	"	25	30 18 20
Pulled,	"	28	30 18 20

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,	barrel.		
BACON, hams, new, Balt. cured,	pound.	14	15
Shoulders, do.	"	10 1	11 1
Middlings, do.	"		11
Assorted, country,	"	10 1	11
BUTTER, printed, in lbs. & half lbs.	"	25	31
Roll,	"		
CIDER,	barrel.		
CALVES, three to six weeks old,	each.	5 00	6 00
Cows, new milch,	"	25 00	40 00
Dry,	"	12 00	15 00
CORN MEAL, for family use,	100lbs.	1 62	
CHOP RYE,	"	1 75	
EGGS,	dozen.	12 1	
FISH, Shad, No. 1, Susquehanna,	barrel.	9 75	10 00
No. 2,	"	9 50	
Herrings, salted, No. 1,	"	4 50	4 62
Mackerel, No. 1, ————No. 2	"		
No. 3,	"		
Cod, salted,	cwt.	3 25	3 37
LARD,	pound.		11

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

U. S. Bank,	par	
Branch at Baltimore, do		
Other Branches, do		
MARYLAND.		
Banks in Baltimore, par		
Hagerstown, do		
Frederick, do		
Westminster, do		
Farmers' Bank of Mary'd, do		
Do. payable at Easton, do		
Salisbury, 1 per ct. dis.		
Cumberland, par		
Millington, do		
DISTRICT.		
Washington, } Banks, 1 p.c.		
Georgetown, } Banks, 1 p.c.		
Alexandria, } Banks, 1 p.c.		
PENNSYLVANIA.		
Philadelphia, par		
Chambersburg, 1		
Gettysburg, do		
Pittsburg, 2 1		
York, 1		
Other Pennsylvania Bks. 2		
Delaware [under \$5] 4		
Do. [over 5] 1 1		
Michigan Banks, 10		
Canadian do. 10		
VIRGINIA.		
Farmers Bank of Virgi. 1		
Bank of Virginia, do		
Branch at Fredericksburg, do		
Petersburg, do		
Norfolk, do		
Winchester, do		
Lynchburg, do		
Danville, do		
Bank of Valley, Winch. par		
Branch at Romney, par		
Do. Charlestown, par		
Do. Leesburg, 1		
Wheeling Banks, 3 1		
Ohio Banks, generally 5a		
New Jersey Banks gen. 3		
New York City, par		
New York State, do a		
Massachusetts, 1 1		
Connecticut, 1 1		
New Hampshire, 1 1		
Maine, 1 1		
Rhode Island, 1 1		
North Carolina, 3a 1		
South Carolina, 4a 5		
Georgia, 5a 5 1		
New Orleans, 7a 8		

TO THE PUBLIC.

Try the New Agricultural Establishment in Grant-street, next door to Dinsmore and Kyle.

Every article warranted to be first rate. The subscribers, grateful for past favors, take this early opportunity of returning their thanks to their customers and the public in general, and beg leave to inform them that they are now provided with a very extensive stock of newly manufactured AGRICULTURAL IMPLEMENTS, suitable to meet the call of Farmers, Gardeners, Merchants, Captains of vessels, and others, viz: 1000 Ploughs, assorted sizes, from \$4 to \$15 each, comprising of the old common Bar Shear, Winand's Self Sharpener; Woods & Freeborn's patent, all sizes, "Davis," "Sinclair & Moore's" improved Hill Side Ploughs, highly esteemed for turning the furrow down hill, with wrought or cast shears; Wheat Fans, of various sizes and patterns, from \$15 to \$50 each, warranted to separate the garlic from the wheat; Corn Shellers, from \$12 to \$20; Cutting Boxes, from \$7 to \$50 each; Corn and Tobacco Cultivators, large and small; Expanding do., Wheat Cradles warranted to have fingers of the natural growth, and Grass Scythes, &c. &c.; Castings, of all descriptions and patterns, by the lb. or ton, to suit customers, allowing a liberal discount to merchants buying to sell again—all of which will be furnished on the most pleasing terms and every article warranted to be of the best quality, in proportion to the cost price. All orders by mail or other-

wise shall be duly attended to with the greatest despatch. We would particularly call the attention of Country Merchants and others, wishing to purchase agricultural implements to sell again, to the fact, that we will furnish them with articles on better terms than they can be supplied at any other establishment in the city. Our assortment is complete and as varied as that of the most extensive concern in Baltimore.

We have also connected in its operations with the above branch of business a complete assortment of FIELD AND GARDEN SEEDS, kept by Thomas Denny—Also Garden and Farm Tools, of various sorts and of the choicest collection, which will enable our customers to have filled *entire* all orders in the Agricultural and Seed Departments. mh 26 JOHN T. DURDING & Co.

MORUS MULTICAULIS TREES FOR SALE.

The Queen Ann's County Silk Company, near Centreville, Queen Ann's county, Eastern Shore of Maryland, have for sale from 20 to 30,000 MORUS MULTICAULIS TREES, which they will contract to deliver in Baltimore this Fall or the next Spring. Persons wishing to purchase can be supplied with any quantity not exceeding the above amount. All communications post-paid will be attended to. P. B. HOOPER,

aug 28 3t Pres't of Q. A. C. Silk Company.

IMPROVED DURHAM SHORT-HORNS.

Early in October next, Mr. Whittaker's 2d sale of pure improved Short Horns, will be held at Powelton, near Philadelphia. Due notice will be given of the day of sale, when pedigrees in detail will be furnished.

The subscriber is authorized by Col. Powel to state that all the best cattle which he has at any time imported, and the improved Short-Horns, which he considered the best in England, were either in Mr. Whittaker's possession, or had been derived from his fold. In this sale, Col. Powel has not the slightest interest.

C. J. WOLBERT, Auctioneer.

aug 28 9t

MULBERRY TREES.

200,000 genuine Mulberry Trees, and as many more as may be wanted, of the most improved kinds—

Consisting of the best selected varieties now in use, for cultivation, feeding worms, and making silk;—being acclimated to this country, and adapted to either warm or cold climates, affording a rare opportunity for Companies or individuals to be supplied, from the most extensive collection of mulberry trees ever seen in any village within the United States.

Autumn is decidedly the best time for removal, and orders left with

Messrs. I. B. Colt, Sec'y of the Connecticut Silk Manufacturing Company, Hartford; Alonzo Wakeman, at the office of the American Institute, No. 187 Broadway, N.Y.; Thomas Lloyd, Jr. No. 236 Filbert street, Philadelphia, Pa.; Luther L. Cox, Baltimore, Md.; B. Snider & Co. Savannah, Ga.; Bliss Jenkins & Co. Mobile, Al; Jam's Lyman, St. Louis, Mo.; Case & Judd, Columbus, O.; G. Harwood, Rochester, N. Y.; and the publishers of this advertisement, or with the subscriber, in Northampton, Mass.

Orders left with the above gentlemen will be promptly attended to, and each will be furnished with samples of the foliage.

Several valuable farms may be had with or without Mulberry plantations. Apply at the office of

D. STEBBINS.

Northampton, Aug. 22, 1838. 7t au 28

TURNIP SEEDS.

5000 lbs. Turnip Seeds of first quality of the following kinds, will be supplied at the very lowest wholesale rates; which will enable venders to make large profits in selling by the pound, and far larger when selling in smaller parcels.

Purple topped Ruta baga or Yellow Swedish Turnip, White flat Field, White Norfolk, Early White Dutch, Yellow Dutch, Yellow Flat Field, Yellow Aberdeen, Large Yellow Bullock, Long Tankard, Yellow Stone, White Stone, Yellow Maltese, Dale's New Yellow Hybrid, Swan's Egg, Red top or Red Round, Green top or Green Round, and others.

N. B. 600,000 Chinese Morus Multicaulis Trees, 3 to 6 feet high, deliverable in October—and 200,000 Morus Expansa, Brussa, and other choice varieties.

WM. PRINCE & SONS,

july 17 3t Flushing, New-York.

MORUS MULTICAULIS TREES.

The subscriber has from 25,000, to 30,000 Morus Multicaulis trees now growing at his residence, with roots of 1, 2, and 3 years old, which will be ready for sale this fall, and which he will sell on moderate terms.

EDWARD P. ROBERTS.

THE FARMER & GARDENER

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, E. P. ROBERTS AND SAMUEL SANDS—EDITED BY E. P. ROBERTS.

No. 20.

BALTIMORE, MD. SEPT. 11, 1838.

Vol. V.

THIS publication is the successor of the late

AMERICAN FARMER,

and is published at the office, at the N. W. corner of Baltimore and North streets, over the Patriot office, at two DOLLARS AND FIFTY CENTS per annum, if paid within one month from the time of subscribing, or \$3 if after that time. All letters to be post paid.

BALTIMORE: TUESDAY, SEPT. 11, 1838.

We regret to learn that the barn and stack-yard of James L. Hawkins, Esq. of this city, was burnt down a few days ago, and destroyed, together with their contents, valued at about \$2,500. The place on which this destruction occurred is a small farm owned by Mr. H. situated in Frederick county, Md. about five miles from his splendid estate and homestead called *Covington*, in the same county. We always sincerely deplore losses to worthy gentlemen by fire or otherwise, as such calamities are calculated to awaken our sympathies, but in the present instance, we feel more than ordinary grief, as it has fallen upon one, who though pursuing the avocations of city life, still felt sufficient concern in those of husbandry to appropriate his means in the promotion of its interests.

Chaptal on Manures—We insert to-day, the first part of an admirable article on Manures by Chaptal, and commend it to the perusal of our readers. Chaptal combined a profound knowledge of the science with the practical part of agriculture, having been himself extensively engaged in its pursuits for many years. The opinions, therefore, of such an individual upon a subject of such vital interest to all engaged in tilling the earth, cannot be too highly appreciated.

The drought still continues, and from present appearances there is no such thing as divining when it may cease. In this region we have had but one rain of any considerable duration since the 1st of June, and that but for about four hours. Indeed, we may say that such has been the case since the 1st April, for the few showers that have intervened since the latter period, has been mere sprinklings, scarcely sufficient to lay the dust. The heaviest rain we have had during the entire season occurred on the evening of the 16th of August, but such was the parched and thirsty condition of the earth that it drank it in with as much avidity as does an old toper the first glass after an

abstinence of long standing; and it passed off without leaving any of those delightful effects that the husbandman has been used to witness.

In many parts of our state and that of Pennsylvania, we regret to learn that the farmers are compelled to drive their stock several miles to water, and in what is termed the barrens of York, Pa. we are told herbage has become so burnt up that many are compelled to feed their stock with the provender they had provided for winter.

Should the drought continue but a few days longer, the crop of Buckwheat in this part of the country must prove a total failure, as it is impossible it can fill without moisture. Our early crop of this grain we have already cut down with a view of converting it into hay for our cows, and by the bye, we trust every farmer will take the precaution of taking care of what buckwheat straw he may have, for if dried properly and salted it makes a very acceptable provender for cattle, and serves to add to their comfort during the rigours of winter.

Millet—The more experience we have with this production, the better are we pleased with it, and the fact of the deficiency of the pastures, the present season, urges us to suggest the propriety of farmers introducing its culture into their respective systems of husbandry. How fortunate would it be for those who are now compelled to feed out their winter stock of hay, had they been so fortunate as to flush up a few acres of their harvest fields, after the grain was cut off, and put it down in Millet, to cut and feed to their stock.—Two acres of it in good ground, would yield grass enough to soil twenty head of cattle six weeks, and carry them in good condition into the middle of autumn. Should such precaution be taken in future, and the necessity for the use of it as green food not occur, it could be suffered to ripen its seed for market, the which being threshed out, would leave a large quantity of excellent provender to add to the winter stock.

But whether drought should occur or not, if cut and given to the milk cows, from its succulence and nutritious qualities, it would greatly add to the yield and quality of the milk and butter, and thereby increase the revenue of the dairy.

Turnips, to use a trite phrase, will be turnips, in this quarter, this season. We know several who have sown four times and will not make a bushel. We have done so twice ourself, and have now no more prospect of gathering a single root than we had before we put the plough into the ground. The first sowing was on the 16th of August, immediately before the rain of that evening. They came up, but by the time their leaves reached the surface of the earth, the plants were attacked by myriads of grasshoppers, which were lying in wait to devour them. Had these destructive insects been armed with well sharpened razors, they could not have done their work more smoothly. Indeed, the knights of the *strop* might learn a lesson from these adroit shavers, by which they might be enabled to do much cleaner work than most of them are now in the habit of doing, and perform their labor with infinitely less pain to those on whose chins they so un-trimly reap.

The Elizabeth City, N. C. Phenix of Sept. 8, in speaking of the Corn Crop, says:

"The corn crop in this and the adjoining counties, has been very seriously injured by the late drought. As we are engaged in farming ourselves we speak with some knowledge of the facts. The corn on that which is considered the best lands, is injured more than a third, while the sandy and poor lands will not produce half a crop. Potatoes are worth nothing except in some moist places—Pasquotank produces more corn than any county in this state, but our exports will be small compared to last year. We understand that in Gates county a great many will have to buy corn. This is bad news, but the worst should be known—The editors of this State and Virginia, could not confer a greater favor on the community than publishing a statement of the crops in their respective neighborhoods.

Great yield of Wheat—It is stated in a western Virginia paper that a Mr. Seawright, of Augusta county, Va. obtained this season, from 13 dozen of sheaves, 15½ bushels of wheat. By way of overtopping this, the Staunton Spectator says, that Mr. Shelton Abney, of that county, obtained from 450 dozen, 420 bushels of clean wheat, weighing from 65 to 67 lbs. to the bushel, and had from 10 to 15 bushels of "tailings" yet to get out. Mr. Seawright's wheat was of the "red chaff" variety. That of Mr. Abney is not stated.—*Chronicle*.

Before you give way to anger, try to find a reason for not being angry.

From Chaptal's Agricultural Chymistry.

MANURES.

[The nature and action of manures explained and illustrated by *M. John Anthony Chaptal*, Count of Chanteleup, Peer of France, member of the Institute, &c.]

Under the general head of manures are comprehended all those substances which, existing in the atmosphere, or combining with the soil, can be drawn in by the organs of plants, and contribute to the progress of vegetation.

Manures are furnished by various bodies belonging to the three kingdoms of nature. Those most commonly employed are the results of decomposed vegetable substances, and some animal matters. The salts, which likewise serve for manures, are imbibed by the pores of plants, and serve to stimulate vegetation.

By comprehending all these substances under the generic name of manures, too extensive a signification is given to the word. I divide manures into two classes; and in order to deviate as little as possible from the customary mode of expression, I shall call those nutritive manures, which supply plants with nourishment; and all those which excite the organs of digestion, stimulating manures. These last are, strictly speaking, the seasoning spices rather than the food.

OF NUTRITIVE MANURES.

The nutritive manures are those which contain juices or other substances, which, being dissolved in water, or otherwise divided to the most minute degree, are capable of being drawn into the organs of plants. All the vegetable and animal juices are of this description. These substances are rarely employed in their natural state for the aliment of plants. It is generally considered preferable to allow them to putrify or ferment; the reason of this is simple. Besides the decomposition resulting from the operation, which renders the substances more soluble in water, the gases produced by it, such as the carbonic acid, the carburetted hydrogen, azote, and ammonias, furnish food for plants, or stimulants for their organs of digestion. It is not, however, well to prolong this decomposition too far; for if it be completed, there will remain only some fixed salts, mixed with those earths and juices which have resisted its action. Besides, the effect of manures, which have been entirely decomposed, is almost momentary, lasting but for a single season; whilst those which are employed before arriving at this state, continue to exert an influence for several years. In this last case, the decomposition, retarded by the separation of the manures into small portions, continues to go on gradually in the earth, and thus furnishes vegetation with its necessary aliments for a long time.

The excrements of animals, formed by the digestion of their food, have already undergone a decomposition which has disorganized the principles of their aliments, and in a greater or less degree changed their nature. The strength of the digestive organs, which varies in each species of animal, the difference of food, and the mixture of the digestive fluids furnished by the stomach, modify these manures to a very considerable extent.

The excrements of some animals, as of pigeons,

fowls, &c. are employed without undergoing any new fermentation, because they consist mostly of salts, and contain but few juices. Fields are often manured with the excrements of sheep, collected in sheep-folds, or scattered, as in parks, by the animals themselves upon the soil; but in general, the dung of horses and of horned cattle is made to undergo a new fermentation before being applied as manure.

The most general method of producing the fermentation of the dung of quadrupeds, is, in the first place, to form upon the ground of sheep-folds and stables, a bed of straw of dry leaves. This bed is covered with the solid excrements of the quadrupeds, and impregnated with their urine. At the end of fifteen days or a month, it is carried to a place suited for fermentation, and there formed anew, care being taken every day to spread upon it litter and the scattering of the racks. The formation of these beds, contributes much to the healthfulness of the stables and to the cleanliness of the animals. When from a scarcity of straw, the beds cannot be made of sufficient thickness, or renewed often enough, a layer may be formed of limed gravel, broken fine, and covered with straw. These earths will imbibe the urine, and when they are penetrated by it may be carried into the fields to be buried in the soil. The nature of the earth, upon which beds are formed in sheep-folds of stables, should vary according to the character of the soil which is to receive them, because, by attention to this, the soil may be improved as well as manured. For argillaceous and compact earths, the layers should be formed of gravel and the remains of old lime mortars; whilst those of fat marl or of clayey mud should be reserved for light and dry soils.

In some countries, where good husbandry is much attended to, the floors of the stables are paved and slightly sloping, so that the urine flows off into a reservoir, where it is fermented with animal and vegetable substances, and used to water the fields at the moment when vegetation begins to be developed.

The art of fermenting dungs with litter is still very incomplete in some parts of France. In one place they let it decay till the straw is completely decomposed; in another they carry it off into the field as soon as it is taken from the stables. These two methods are equally faulty. By the first, nearly all the gases and nutritive juices are dissipated and lost; by the second, fermentation, which can take place only in masses, will be but very imperfectly carried on in the fields, and the rains can convey to the plants only that portion of the nourishment afforded by the manure, which they can obtain by a simple washing.

The most useful art perhaps in agriculture, and that which requires the most care, is the preparation of dung-heaps. It requires the application of certain chymical principles, which it is not necessary for me to explain, since it is sufficient to point out to the agriculturist the rules by which he should be governed in his proceedings, without requiring of him an extensive knowledge of the theory upon which they are founded.

Solid substances, whether animal, vegetable, or mineral, do not enter into plants unless they are previously dissolved in water, or are drawn with that fluid in a state of extreme division.

Animal and vegetable substances which are in their nature insoluble in water, may, by being decomposed, form new soluble compounds, capable of furnishing nourishment for plants.

Animal and vegetable substances deprived by the action of water of their soluble particles, may in the course of their decomposition form new compounds susceptible of being dissolved. Of this I have given instances in speaking of mould.

That which renders the art of employing dung-heaps difficult, in proportion as it is useful, is, that some methods which are adopted occasion a loss of a part of the manure. In fact when the clearings of the farm yard are carried fresh into the fields, and applied immediately to the soil, vegetation is undoubtedly benefitted by the salts and the juices contained in them; but the fibres, the fatness, the oils remain inactive in the earth; and their final decomposition is slow and imperfect. If, on the contrary, the collections of the farm-yard be heaped up in a corner of it, the mass will speedily become heated, carbonic acid gas will be evolved, and afterwards carburetted hydrogen, ammonia, azote, &c. A brown liquid, of which the colour deepens gradually almost to black, moistens the heap, and flows upon the ground around it; all is by degrees disorganized; and when the fermentation is completed, there remains only a residue composed of fibre and some carbon in powder.

In those places where they do not allow fermentation to arrive to this degree of decomposition, they still lose by mismanagement, considerable part of their manure.

The most common method is, to deposite in a corner of the farm-yard the dung and litter, as it is drawn from the stables, adding to the mass every time these are cleared, and allowing it to be fermented till the period of sowing arrives, whether it be in spring or autumn, when it is carried upon the fields requiring it.

This method prevents many imperfections. In the first place, several successive layers being formed, no two of them can have undergone the same degree of fermentation; in some it will have gone on for six months, and in others but for fifteen days. In the second place, the heap, being exposed to rains, will by frequent washings, have parted with nearly all its salts and soluble juices. In the third place, the extractive portions of the lower and central parts of the mass, the mucilage, the albumen, and the gelatine, will be entirely decomposed; and, lastly, those gases which nourish plants, if developed at their roots, will have escaped into the air; and Davy has observed, that by directing these emanations beneath the roots of the turf in a garden, the vegetation was rendered very superior to that in the vicinity.

How long should dung-hills be allowed to ferment, and what methods ought to be pursued in forming them. This question leads us to cast a glance upon the nature of the dunghills; and it is not till after having ascertained the difference amongst them, that it can be answered.

The principal parts of vegetables which are employed as manure contain mucilage, gelatine, oil, starch extractive matter, and often albumen, acids, salts, &c. with an abundance of fibrous matter, insoluble in water.

The different substances afforded by animals, including all their excretions, are gelatine, fibrine

mucus, fat, albumen, urea, uric and phosphoric acids, and some salts.

The greatest part of the substances, constituting animals and vegetables, are soluble in water; and it is evident that in that state they can be employed as manures without previous fermentation, but it is necessary, that those which contain much insoluble matter should be decomposed by fermentation, because by that process their nature is changed, and they form new compounds, which being capable of solution, can pass into the organs of plants.

Messieurs Gay-Lussac and Thenard have obtained by an analysis of the woody fibre oxygen, hydrogen, and especially more carbon, than from any other part of the plant, and they have determined their several proportions; we know that fermentation carries off much carbon; it is then evident that, by causing the fermentation of the vegetable fibre, the principle which forms its distinguishing characteristic will be gradually diminished, and that it will no longer be a body insoluble in water. It is in this manner that woody plants and the dryest leaves are converted into manures.

But as all the solid parts of plants contain fibres which cannot be rendered soluble in water, but by a long period of fermentation; and as it is in the fibre, that carbon, a principle so necessary to vegetation, chiefly exists, the fermentation of plants is indispensable to the procuring of the best part of their manure.

The custom of appropriating some crops whilst green to the manuring of the ground, may be perhaps objected to; but I have observed that in that case the plants are buried in the earth at the time of flowering; and whilst they are succulent, and their fibres soft, and but little formed; and that that warmth and the action of water in the earth, was sufficient to decompose them: this would not take place if the stalks were dried and hardened by the formation of the grain.

The dung of quadrupeds may be mixed advantageously with the earth at the time of being taken from the stable, if it contain no litter, but if it does, it appears to me better to cause it to undergo a slight fermentation, in order to dispose the straw or leaves of which it is composed in order to become manure.

It is necessary, in producing the fermentation of dung and litter, to use certain precautions by which the inconvenience arising from the usual mode may be avoided.

Instead of heaping up in large masses the collections of the barn-yard and stables, and allowing them to run uncovered, and exposed to the changes of the weather, they should be placed under a shed, or be at least protected from the rain by a roof of straw or heath. Separate layers should be formed of each clearing of the stables, cow-house, and sheep-pens. These layers should be from a foot and a half to two feet in thickness; and when the heat produced in them by fermentation, rises in the centre to more than 95°, or when the mass begins to smoke, it should be turned, to prevent decomposition from going too far.

Fermentation should be arrested as soon as the straw contained in the heap begins to turn brown, and its texture to be decomposed. To do this the mass may be spread, or carried into the fields, to

be immediately mixed with the soil; or there may be mixed with it mould, plaster, turf, sweepings, &c.

To be Continued.

THE SILK CULTURE.

It is surprising that more of our people do not engage in this business, and it can only be accounted for on the ground that they are already profitably employed in some other business, or else will not take pains to inform themselves of the simple and profitable manner in which this new business may be conducted.—We saw, on Wednesday, at the house of Mr. Joshua Toppan, in Marlborough street, several thousand silk-worms, who have been busily employed all this week in spinning their cocoons. A considerable quantity of the silk, reeled last season, was also shown us by the lady of Mr. Toppan, on which a premium was obtained at the exhibition of manufactures last year, and it was a truly beautiful article. This silk was all the produce of the white mulberry, except a small portion, which was easily distinguished by a wire feeling, and which was the produce of the common black mulberry.—This last is no doubt quite as good for sewing-silk as any other, but probably could not to so good advantage be applied to any other purpose.

The process of rearing and feeding the worms, and even that of reeling the cocoons, is so simple and easy, and would form such a desirable and pleasing employment for children and females, that we cannot but repeat our surprise, that the Yankees, who are ever on the alert to turn an honest penny, do not make greater progress in this business.

The value of American silk exceeds the imported raw silk, not only in lustre, but strength of fibre, and the small comparative waste in the manufacture; and is probably 25 per cent. in value over the imported article; and yet it has been satisfactorily demonstrated in Connecticut and other parts of the country, that raw silk can be produced at a cost of \$1 50 per pound, which will readily sell at from \$4 to \$7 per pound. The quality and value of the silk depending on the skill and perfection in reeling.

Some cultivators assert that an acre of land planted with the *Morus Multicaulis*, will give sufficient food the second year for a million of silk worms, and as three thousand cocoons make one pound of silk, one million will make 333 $\frac{1}{3}$ pounds of silk. It will be seen at once from this, that the profit must be very handsome, even if we suppose those commencing the business should not be able to produce the silk so cheaply as is done in Connecticut, where they have more experience in the matter.

An individual of high respectability, in New-York, is stated, at the request of the editor of the *Cultivator*, to have made thorough experiments for the purpose of ascertaining the certain profits of an acre. He made 100 pounds of raw silk from an acre the first year of setting out the Chinese mulberry, and by strict economy of time, labor and expense, although he gave three dollars per week and board to two experienced females, as teachers in gathering foliage, feeding worms and reeling silk, he found that his silk cost him only two dollars the pound, and estimates his silk at

least six to seven dollars the pound, on account of the excellency of the reeling.

We are firm believers in the success of the silk culture in the United States, and believe it entirely unnecessary that twelve or fifteen million dollars per annum should be paid for this article to foreign nations. As to what may be said against it by theorists, we have stubborn facts to oppose, and those who are disposed to be discouraged by imaginary difficulties, we would refer to the newspapers and pamphlets published at the time when the cultivation of the cotton plant was commenced in the United States, to see how much was said and written to prove the views of the cotton planters a mere chimera. The result has shown who was correct; and if the silk raisers proceed as steadily and resolutely as did the planters of cotton, a similar success will crown their efforts. Their exertions will be rewarded by fortunes to themselves, and a lasting benefit to their country.

In speaking of Mr. Toppan's silk growing experiments, in which he engaged rather as an amusement, than a source of profit, we are disposed to say a word concerning his grounds.—On looking over them we were forcibly reminded of the remark of some one, we believe it was Mr. Jefferson, that ten acre farms are the most profitable. Here on six acres of land, Mr. T. obtains a handsome living, with comparatively little labor, and free from the numberless vexations which attend the merchant, the mechanic and the manufacturer at every step.—He not only maintains his family in comfort and independence, but he has abundance of leisure during a large portion of the year, has a well stocked library, takes a daily paper and several weekly and agricultural journals, besides periodicals; and we doubt not, (though it would have been impertinent to have asked the question,) lays up money, besides all this. Unfavorable as have been the two or three last seasons, he has raised his own bread stuffs, and a supply of vegetables, sufficient to pay all household expenditures. This year he has, we should judge, about an acre and a half of wheat which is well advanced and will no doubt yield him 40 bushels, an acre of corn which will produce 30 to 40 bushels, an acre of potatoes, and nearly as much devoted to oats; the remainder is occupied by garden vegetables. And yet this land is by no means in a high state of cultivation; and some additional labor and a trifle more of expense would easily double the aggregate of the crops.

When six acres of land will thus sustain him, where is the man, who so long as God shall bless him with health, may not smile at all the combinations of adverse fortune, and treat them as but the small dust of the balance? Why need we then bear and feel so much of poverty? It is not because there is not sufficient for all; but because society is not yet properly organized, and the social system still stands in need of great reform.—*Newburyport Herald.*

MILK SICKNESS.

The following account of the "milk sickness" which has been so fatal in some parts of the west, is from a correspondent of an Indiana paper.

"At Logansport, on the banks of the Wabash, I was cautioned by an elderly lady against using either milk, butter or beef, on my way to Vincen-

nes. As a reason for her caution she informed me that the milk sickness was common in this State. I had heard of it before, but knew little of it. She informed me that very many deaths occurred by this dreadful malady. There is a difference of opinion as to the cause that produces it; but the general opinion is, that it is occasioned by the yellow oxyde or arsenic in the low ground and woodland, and particularly near the Wabash river, and that some weed (yet unknown) imbibes the poison, and when eaten by cattle, causes them to quiver and stagger and die within a few hours.—If cows eat it the milk is poisoned, or butter that is made from the milk, and is also as sure death to those who use the milk or butter as it is to the animal that eats the weed. Care is taken to bury such cattle as die with it, for if dogs, &c. eat their flesh, they share the same fate, and it operates upon them as violently as upon the creature that was first affected with it. The butcher uniformly, in this state, runs the victim of his knife a mile to heat the blood, and if it has eaten the weed, it will at once, on stopping, quiver and shake; if it does not it is considered safe to butcher and this is the uniform test when beef cattle show no signs of having ate the weed. Indiana is not alone in misfortune, there have been many cases in some parts of Ohio, and south of St. Louis and other of the southwestern States. I have seen many farmers with comfortable buildings and improvements entirely abandoned, and their owners fled into other quarters to avoid the dreadful curse. And yet I confess I have never seen any section of the country superior in soil to the land adjoining the Wabash, and this is the only objection to it.”

TO DESTROY THE GRAIN FLY.

A gentleman has just communicated to us a method of destroying the grain fly which will cost but a very little; and which he thinks will not only be effectual in saving a crop of grain, but if generally practised by farmers, will rid the country, in a great measure, of this enemy. He observes that he was lately examining a piece of wheat and was surprised in finding only now and then a grain worm in the hull; as they were generally very plenty, he inquired of the farmer the cause, who told him that he had destroyed the flies by carrying pitchwood torches through his grain, commencing in the evening as soon as it began to grow dark, and as early in the season as the flies made their appearance, and continuing the operation till the flies were all destroyed or had fled, which was about six or seven nights. As he passed through the grain, he carried a pole that struck against the tops of grain, which caused them to fly into the fire, as is the general practice with insects, when they were either destroyed, or disabled by having their wings burnt off so as to prevent their doing mischief. This farmer said he was induced to try this method as his neighbor last year saved his grain in this manner, while others in the vicinity had theirs greatly injured by the grain worm.

A cheap apparatus can be made for destroying flies in this manner, by which the business can be done with great expedition. Take two long, light poles, and commencing two or three feet from the butt ends, cut them away so as to bring the butt nearly to a point, then splice them together, lap-

ping about as far as they are cut away, and fasten them with nails. In this manner a great length of pole may be had with but little weight, as it is to be carried by the middle. One pole may be used, but it will not be on so good a principle for lightness. We will give another method of making this part of the apparatus, as it may be more convenient for fixing the fires. Take a very long piece of board, straight on one edge, four or five inches wide in the middle, with the other edge cut away straight from the centre to about one inch in width at the ends; let the straight edge of this board be up, and nail to it another piece, lying flat wise, of the same length, three or four inches wide in the middle, and about one and a half inch wide at the ends. This will be light and strong.

These boards or poles are to be carried so as to strike the tops of the grain and start the flies, and the fires should be a little above the boards so as not to burn the grain. When pitchwood can be had it will be good for fires; pieces can be fitted to small holes bored into the poles or boards; they should be of sufficient length to bring the fire above the wheat. Where pitchwood cannot conveniently be obtained, tar, which is very cheap, may be fixed with tow so as to burn long, and if the light be not bright enough, spirits of turpentine may be added.—The lights should be within two or three feet of each other. A thin piece of board might be elevated ten or twelve inches above the flat piece, before named, and on this might be fastened light vessels for the tar. By proper care in fixing poles or boards, a breadth could be taken through a piece of grain of 20 or 30 feet.

These suggestions as to an apparatus for destroying this great pest of the farmer, may be of advantage to some, others may fix a better contrivance. We regret that we did not hear of this method, earlier, that it might have been tried when the flies first made their appearance.—Though the season in which the flies usually do mischief may be passed, yet farmers may judge, in a measure, of the utility of this method by carrying lights through their wheat as soon as it is dark, as there may be some flies remaining. We think that it appears reasonable that the grain fly may be destroyed as here recommended, and the experiments that have been made, so far as we have heard, have been successful. The vast amount of grain destroyed by these insects, should induce every farmer in the country to exert himself to discover a remedy against their ravages, and every method recommended that has any reason to support it, should be fairly tested; and those who make experiments should communicate the result to the public that others may benefit from their experience.—*Yankee Farmer.*

SHEEP WORM.

There is a fly that deposits its eggs in the nostrils of sheep, usually in August and September, where it hatches, and then makes its way up into the head and often causes death.—The frequent application of tar to the nose of sheep, is considered the best preventative. Put tar on boards and strew on salt, and the sheep will smear their noses with tar in eating the salt. The following method is recommended by some sheep master. Take a small log, dress it a little upon

the upper side, bore holes into it with a large augur at short intervals, about two or three inches deep, fill these holes with salt, and with a brush apply tar as often as once a week around the holes, and give the sheep daily access to the salt. A small quantity of tar frequently given to sheep is considered conducive to their health. Alexander Reed, Esq. of Washington Co. Pa., observes, “we have long been satisfied that the use of tar as a medicine or condiment for sheep has not been duly appreciated. The cough and foul nose, I am disposed to think, are both produced from the same disease. When we notice them we lose no time in removing them from the flock, and make a free use of tar. It rarely fails to effect a cure in a few days, unless the animal is old or unsound.”—*Id.*

SEED WHEAT.

It is of the greatest importance to save the best seed in order to prevent a depreciation in grain and make improvements if possible. Every farmer should examine his wheat before harvesting, and if a part of it is superior to the rest he should keep that by itself for seed, and when he threshes it he should beat the bundles over a cask or box, so as to get out the large heavy kernels only and save them for seed. In this way seed may be improved with very little trouble. A further improvement may be made by using a sieve that will allow the small grains to pass through and retain the large for seed.—*Id.*

[Selected for the “Practical Farmer,” by B. H.]

HINTS TO YOUNG FARMERS.

CULTURE OF THE MIND.

You know well that one piece of land, a garden for instance, yields vastly more than another piece of ground of equal natural fertility.—And you know equally well, that one man abounds more in knowledge and usefulness, than another to whom nature has been alike bountiful. It is culture—it is the industry and perseverance of man exerted in one case, and not in the other, that produces the marked contrast in both. The cultivator is sure to be rewarded in his harvests, for the care and labor which he bestows upon his soil—and the reward is no less certain to him who devotes his leisure hours to the culture of his mind. The soil administers to our animal wants. Knowledge not only greatly assists, in supplying these wants, but is the primary source of intellectual wealth, which dollars alone cannot give; and when consorted with good habits, tends to refine, elevate and distinguish men above their fellows. Talent is not hereditary. You will see, on looking around, that most of the distinguished men of our country have sprung from humble and obscure parentage. They are indebted for present distinction, to the culture which they have themselves bestowed upon their minds. The road to usefulness and honorable distinction is equally open to you, and the time has arrived when you must decide whether you will compete for the noble prize.

If you wish to be prosperous in your business—to know and profit by the improvements of the age, cultivate your mind; for this is the great labor-saving machine. If you wish to see your children intelligent, thriving and respected, teach them,

by example, to cultivate the mind. If you would be useful to your friends, and merit the confidence and esteem of your neighbors, seek early to qualify yourselves for the duties of social life, by the culture of the mind. If you aspire to intellectual enjoyments which flow from the study of the material world—from the order, harmony and beauty which meet us in every walk, in the manifold and wonderful works of the Creator, cultivate the mind. In fine, if you would prosper in your business, your family, and in society, cultivate your mind.

But knowledge is not always wisdom, and therefore, be as scrupulous in regard to your studies, as you are in regard to the seed which you deposit in the soil. You will reap whatever you sow; and the mind is as liable to be cumbered with weeds as is the soil. Read, therefore, whatever tends to instruct you in your business, to establish you in good habits, and to fit you for the responsible duties of life. Acquaint yourselves with the inventions and improvements of modern art. Make yourselves acquainted with the general facts of science, with the wondrous laws by which the Almighty governs all those around us; and with the endless illustrations of laws, in the world and all its parts. The facts of natural history will afford abundant matter for agreeable and useful knowledge. The plants, the animals, the minerals, the soils of your country and other countries—the changes of the seasons—the make and composition of all that surrounds you, duly observed, and made the subject of reading, of conversation, of reflection, will at once store your mind, and raise your ideas of the wisdom and goodness of Him who formed you such as you are. Temperance, self-government, moderation, avoidance of all abuse of the body, are written in the very make of the body itself.—And it will hence plainly appear, that when our Maker says, abstain from all iniquity, he does but say, "Do thyself no harm." Who aims at excellence will be above mediocrity; who aims at mediocrity will fall short of it.

SELECTION OF SEED WHEAT.

RICHMOND, Ky., August 6th, 1838.

To the Editor of the Franklin Farmer.

SIR:—Having derived much valuable information from your interesting paper I feel the injunction upon me, as an imperfect *quid pro quo*, to communicate to you the subjoined manner of selecting seed wheat.

Many years ago, a farmer in this quarter, who cultivated the same variety of wheat and in the same manner as did his neighbors, was known to have a yield of a third more to the acre.—Upon inquiry as to the cause, the unsatisfactory answer was given—"I sow barrel seed." The neighbors purchased of him their seed wheat, and the first year had a yield equal to his; but selecting their seed as formerly, the second and third crops were but little, if any better, than was raised by them previous to their purchase of seed. They again purchased, and their fourth crop was equal to the first, but their fifth and sixth crops were like their second and third.—How to solve this apparent mystery, caused many a neighborhood consultation and discussion. The vender of the seed, saw too inviting a prospect to make money from the sale

of seed wheat to induce him to disclose the manner of its preparation, and he struggled to keep it concealed. It was ultimately discovered, however, and was as follows:

When you are ready to get out your wheat, place a barrel or box in your stack yard, open at one end; before you pass the bundle to the treading floor, give it one or two strokes across the open end of the barrel or box, by which, the best matured grains will shatter off, then winnow and use for seed.

Thus selected it will be far preferable to the seed prepared by running it through a coarse sieve; for it is known to every observant farmer, that many of the largest grains of both wheat and rye are unripe or diseased, and yet they do not shatter out as easily as those which are perfectly ripe.

I have ten acres of Baden corn in full shoot, giving promise of a very large yield to the acre.

Respectfully, W. C. G.

SUGAR BEET FOR HOGS.

Mr. Editor—Much has been said upon the subject of cultivating the Sugar Beet for the purpose of making sugar. I think, from the little experience I have had, that the root and top are more valuable for fattening hogs than any other cultivated root, being very nutritious. The sugar beet is rapid in its growth, and when planted early in season, will be found to be about six weeks earlier than any other root which is used for fattening swine. I have usually cut the roots and the tops suitable for feeding and then boiled them; they make good food without the aid of provender, and when boiled with potatoes or apples, the swine will eat the tops and roots of the beet first. By depending upon the beet, the farmer might begin to fatten his swine six weeks earlier, and if he chooses can add an equal quantity of windfall apples. The beet will sweeten the apples, and the swine will improve very fast.

L. G.
N. Bedford, Mass., 1838.

[Gen. Far.

SALT FOR MANURE.

But very little salt is used for manure in this country, and but very few cultivators are aware of its virtues for this purpose. In England a great deal is used, and numerous experiments there show conclusively that it is very beneficial. The cheapness of salt in England renders it more profitable there than it would be here; of course it would not be advisable to use it so extensively here as it is used in that country; yet there is no doubt that it might be considerably used to advantage in this country on and near the sea board and in the interior near salt manufactories, where it can be obtained at a low price.

Besides its valuable effects in promoting vegetation, it is of great advantage in destroying insects, and if it had no other effect than this, it might, in many cases, be profitably used, especially on old ground. We have heard some gardeners say that they could not raise good turnips and cabbages on old ground without a liberal use of salt.

An Englishman informs us that in his country farmers sow about 700 pounds of salt on an acre of tillage and it is considered an excellent manure; they sow about 500 pounds on grass lands, wet and dry, and its good effects are lasting; it destroys

moss and increases the crop very much. He observes that a neighbor of his had his crop of wheat much injured by angle worms as was supposed, as they were very numerous indeed, the next season the same piece of land was manured with salt, and the next morning after it was put on an abundance of worms were found dead on the surface; the crop of wheat was very large that season.

A farmer in this country observes that 12 years ago he ploughed a piece of grass land that was run out, having been mowed many years in succession, and bore nothing of consequence, not having hardly sward enough for the turf to hold together to turn over. He dressed it with barn manure. The piece contained about 30 square rods, on one half of which he sowed a bushel and a half of salt, and harrowed it in. The turnips on the salted land run to tops, as it was too rich by having both kinds of manure, but the crop of grass has been one fourth larger ever since, and it now produces a good crop, while the other is nearly burnt out.

It is stated in English works that from 7 to 15 bushels of salt are usually sowed on an acre, and exact experiments show that where it is used alone as a manure or with most other kinds of manure, it adds much to the produce of most all kinds of crops.—*Yankee Farmer.*

SPICED TOMATOES.

As this is the season for securing a supply of this healthful vegetable, we commend to all housekeepers to put up some after the following recipe. By so doing they may preserve them perfectly good until tomatoes come again:

Recipe for a bushel of Tomatoes.—Take your tomatoes and pour boiling water over them, skin them, then boil them well, after which add a teaspoonful of salt, a tablespoonful of black pepper, one tablespoonful of cayenne, an ounce of cloves, an ounce of mace, mix well, and put the tomatoes in jars, run mutton suet over them and tie them in jars, either with strong blue paper or buckskin. Prepared in this way they will keep a year.

[We had Tomatoes preserved in this manner, during the whole of the last winter. The quantity of cloves, however, in this recipe, is greater than is required. Half an ounce to the bushel is sufficient.—*Al. Ev. Jour.*]

NEWSPAPER PROFITS.

Gen. Duff Green late of the United States Telegraph, has published a statement of the amount due to him from delinquent subscribers in the States and Territories of the Union. The sum total is fifty-five thousand six hundred dollars, of which two thousand and eighty-seven dollars are due from the State of New York. This is an enormous amount of arrearages, but the fact is, it is only to be expected from the manner in which the business of printing newspapers is carried on in this country. The system of unlimited credit in all directions to subscribers, leaving it in reality almost entirely to their integrity and sense of justice whether any thing is paid, is sure to be attended with a heavy and unavoidable loss. The

proprietors of newspaper establishments, out of the large cities, will never realize their just profits until the custom of exacting payment in advance becomes generally and rigidly enforced.

THE SUGAR BEET.

A paper published at Northampton, Massachusetts, states that immense quantities of the sugar beet will be raised, the present season in that region, and that it yields as high as thirty tons to the acre. In Illinois, the crop is much greater, but even at thirty tons, an acre of land gives 3600 pounds of sugar, and 4800 of molasses. To what purpose can land be more profitably applied, especially as the remains of the beet, after extracting the sugar, are extremely valuable for fattening cattle and hogs?

How easily might our farmers make their own sugar, with no more apparatus than is found in every kitchen. Were the people of the United States to manufacture their sugar, which they could do with all ease, it would save an immense sum to the country. In 1837 there were upwards of one hundred and thirty-six million pounds imported into the United States at a cost of more than seven millions of dollars, all of which might be saved, if our farmers turned their attention to this culture. Let it not be said that other articles of produce are exported to balance the importation of sugar, for the same year, (1837,) there were imported into the United States the single article of wheat, to the value of more than four millions of dollars, and an equal amount of flour, rye, and other bread stuffs.

Such a course of trade would ruin the most prosperous country in the world in a few years. We had no more bread stuff than would supply the people, but the derangement in the currency had raised the price of every article to such a height, that the farmer in Europe, could undersell ours, besides paying freight across the Atlantic, and other expenses.

It is devoutly to be hoped that such disastrous times may never return. Our people ought to learn wisdom from their past embarrassments.—*Backwoodsman.*

BEAVERS.

As you have obliged me in every request I have made of you, I feel it but an act of justice and courtesy, to give you the information you seem to desire (in a paragraph in your paper of the 8th inst.,) relative to the appearance of the Beaver, in the county of Surry, Va. It has long been known that these animals to some extent, remain in this part of the country—for instance, in 1832 or 3, I was on a visit to my only brother, in the county of Sussex, residing contiguous to the Nottoway river, on the South side.

In that year, he had joined a neighbor of his in the cultivation of a part of the estate of the late Dr. Downman of that county. He invited me upon that occasion, on a particular day, to accompany him to that part of his then growing crop, which was chiefly corn; and upon arriving on the banks of the river aforesaid, he showed me the most ample proof of the existence of the Beaver in that water, and innumerable instances of the most perfect paths at which they would come up

the bank, pass through the fence (always at the same place) and oftentimes penetrate the fields for a quarter of a mile or more. I remember distinctly, that he told me he had several times tried to stop the gap, which he found they passed in at, but never could, although he had been so particular as to have mauled, for that special purpose, hickory rails, and never had known them to fail of being cut in two in the course of two or three nights—particularly, at particular seasons of the year, and "loud and long," I remember, were his complaints of the ravages committed on his corn, at all stages of its growth, by this wonderfully mischievous and subtle animal; for, as he informed me, with all the pains he had taken, in which he had killed several Otters, many Muskrats, as yet, he had never been able to get a shot at a Beaver, though they had been frequently seen. Well, in February of this year, my brother visited me, and I asked him if he had ever killed a Beaver? to which he replied, no—but informed me, that a man, a blacksmith by profession, and a "Yankee," had removed to the county and settled on the identical land that he then cultivated, and that he had constructed steel traps of his own make, in which he had, up to that time, caught 3 or 4—two of which were of considerable size, much to the gratification of the neighboring farmers. For, to use his own remark, these animals were more dreaded by the neighborhood near the bank of this river, than was ever the Blue-tail Hawk by the fond Dughill hen, with a brood of chickens.—For myself, Sir, I am of the opinion, that these animals are to be found in many sections of Virginia, at this day. New Kent, my native place, for instance, has a bold run a few miles below the Court-house, to all time known as the Beaver Dam Run.—So, also, Goochland and many other of the counties in Virginia, have places thus named. One thing, I assure you, I never passed the run named, in New Kent, since it was first shown me, now 30 odd years, but I thought, if I examined it at all, that I saw signs of the Beaver. If, therefore these additional proofs of the existence of that animal, be thought of any service to you, you are at liberty to use them in any way you may see fit—however desultory and crude they may appear. I have but little doubt, the scientific "Benefactor," the Editor of the Farmers' Register, Mr. Ruffin, could, if his leisure would permit him, give you many valuable proofs in confirmation of the fact of the existence of Beaver in the "Old Dominion."

Yours, very truly,

Richmond, May 9, 1838. B. GRAVES.

Richmond Enquirer.

THE CORN CROP IN FREDERICK COUNTY.

The Citizen of yesterday says: "All speculation with regard to this crop, in our county, are now at an end. It is beyond the possibility of seasons to affect it, and we feel safe it averring, that not one fourth of the usual average per acre will be made. The fields which two weeks since might have been benefitted by seasonable weather, are now past recovery. The farmers are now going through their fields cutting off the stalks that will yield no grain, with a view of securing the fodder."

CROPS IN MISSISSIPPI.

The Vicksburgh Sentinel of the 20th ult. says:—"Having travelled over a considerable portion country this summer and conversed with men from different parts of the State, we have no hesitation in saying that the crops of corn and cotton, except on the Mississippi river, will be unusually short. We do not think that it will average two-thirds of a crop off the river. The unseasonable planting season, and the frost seriously injured the cotton. The *stand is bad* generally in the interior, and the drought has ruined the corn except on very moist ground. About Columbus and in many parts of the country there was no rain for two months preceding the 8th of August.—The corn has been literally burnt up."

CROPS IN VIRGINIA.

Reports of a great and certain injury from drought are heard from almost every part of lower and middle Virginia, (with the exception, perhaps, of very small sections that have been peculiarly favored,) from the northern valley counties, west of the Blue Ridge mountains, from the Eastern Shore of Maryland, New Jersey, and Pennsylvania. The newspapers are now full of such reports, which would extend the damage much further, but we limit our views to what has been either seen or heard of in conversation with well informed and highly respectable observers of the scenes described, or obtained from correspondents, as much to be relied on.

In Gloucester only have we heard of even average crops of corn being expected; and two gentlemen from that county are the only persons heard from, who expect themselves to make better than average crops. The letter of one bearing date of August 4th, is given below; the other was seen as late as Aug. 24th. Also, on a few of the best farms on the lower part of James river, fair crops of corn are expected. Some of the poorer lands by the railway between Richmond and Fredericksburg do not seem to have suffered so much by drought, as by other causes of unproductiveness. Elsewhere no estimate of any county would put the diminution of the corn crops at less than one-fourth below an average, and more frequently the estimate of loss would be one-half or more. We hope and trust that very few parts of the State have suffered half as much as the generally poor country of Stafford and lower Fauquier, which stretches from Fredericksburg to the Springs. The damage here must amount to 75 per cent, unless the land is totally worthless for corn in the best of seasons. The greater number of acres seen on the whole route of 36 miles (from Petersburg to Fauquier Springs) will not yield three bushels each and many acres will not make even one bushel to each. The drought extends, with its worst effects over the rich grazing lands of upper Fauquier, Albemarle, and the other Piedmont range of lands generally.

We know by experience the difficulty of forming in advance estimates of the product of growing crops; and also it is certain that the greater the calamity, the more it is magnified and exaggerated by the imagination and the fears of even the most cautious and judicious, as will as the most respectable and veracious farmers: Therefore we strike off a large amount of the usual estimates of general loss when we suppose that the present corn crop

will be found one-fourth to one-third below an average gross product; and through all the great regions spoken of above, there will be certainly no surplus, even if not a great deficiency to be supplied by importations from distant and more fortunate places.—Gloucester, the only county in Virginia from which any good crops are reported, is part of a fine corn producing district. From the next adjoining counties, and from the Eastern Shore of Virginia, nothing has been heard. The northern neck, or peninsula between the Potomac and Rappahannock, has shared in the general drought.

Even in places where heavy rains have fallen, and more than once, the injury is very great. The prevalence and unremitting action of great heat have been such that the heaviest rains seemed to have entirely evaporated in a few days.

By information from North Carolina, the crops have suffered as severely by drought, in the upper part of Northampton and Halifax and in Warren, Granville, Caswell, and Wake counties. On the low-grounds of the lower Roanoke (a very rich and highly important coin district,) the season has been favorable enough to promise average crops.

In Kentucky, as late as August 17, the season had been highly favorable to corn and other crops.

The crop of wheat has fallen much short of early expectations, and over a much wider extent of country than was then known. The unusually large proportion of straw caused the general error of estimate.

BEET-SUGAR IN MICHIGAN.

This new state bids fair to take the lead in the manufacture of sugar. We copy the following paragraph from a Detroit paper.

"It will be recollected that our Legislature, at its last session, passed a law offering a liberal bounty on all beet sugar raised in this state, and an extensive company has been organized at White Pigeon for its manufacture. We learn that the agent of this company has recently been despatched to Pittsburg and Philadelphia, with instructions to procure a hydraulic press, and the necessary apparatus and chemicals, used in the manufacture of sugar. The beet crop in that region is said to be in excellent condition, and promises a great yield. The success of the enterprise can hardly longer be considered doubtful."

This is good news, and we trust the expectations will be fully realized. Michigan, in pushing her agriculture, counting her wheat by millions, and manufacturing her own sugar, is doing more to relieve her citizens from present pressure, and place her prosperity on sure foundations, than she would be by passing ten general banking laws, like her present one, or turning out a batch of wild-cat banks once in six months. We rejoice to see this thriving young state on the right tack, and hope she will now, as she certainly may without difficulty, go ahead.—*Genesee Farmer.*

We have received the second number of "The Farmer's Advocate and Miscellaneous Reporter," published by John Sherwood, Jamestown, N. C. It is issued twice a month, 16 pages, price \$1.25 per annum.—The number before us, we are sorry to say, is a poor specimen. It is altogether too small,

and there are several articles in it which have no bearing whatever on farming. If it is enlarged, there is some chance of success, but in its present form, its patronage we think will be limited. In fact, we have already too many papers of the kind, and we know of no one which is more entitled to public favor than the Baltimore Farmer & Gardener.—*Elizabeth City Phenix.*

EASTERN SHORE CATTLE SHOW POSTPONED.

The Trustees of the Maryland Agricultural Society of the Eastern Shore, have given notice that in consequence of the failure of the corn and oats crops, and the deplorable condition to which the stock has been reduced by the unprecedented drought, the cattle show has been postponed for one year, and that the next will be held on or about the 1st of Nov. 1839.

AGRICULTURAL IMPLEMENTS AND SEED STORE.

THE SUBSCRIBER informs the public that he keeps constantly on hand at his old establishment in Pratt-street, near Hanover, a large assortment of PLOUGHS and Agricultural IMPLEMENTS generally, which are too numerous to name in an advertisement, but invites such of the public who are in want of any articles in his line to call, assuring them that his work shall be as well made, of as good materials, and on as reasonable terms as any in the State. His patent Cylindrical Straw Cutters made on his late improved plan are kept at all times on hand, of various sizes and prices, with wood and iron frames—and he challenges its equal in any part of the world. Having an iron foundry attached to my establishment, all orders for Ploughs and Machine castings can be furnished at short notice and on reasonable terms.

In store—Herds and Orchard GRASS SEEDS, of prime quality; also, Landreth's superior GARDEN SEEDS. He is also agent for Mr. Samuel Reeves' Nursery, near Salem, New Jersey, whose fruit trees he can recommend to the public with confidence. Those wishing Trees from that Nursery this fall should hand in their orders immediately.

J. S. EASTMAN.

N. B. On hand, two *Threshing Machines*, with portable horse powers, that can be highly recommended and warranted equal to any in use.

NEW SEED STORE.

The subscriber has just received a FRESH SUPPLY OF GRASS SEEDS, warranted to be genuine and fresh, suitable to the approaching season, such as

Timothy }
Orchard } GRASSES
Herds or Red Top }
Also, BUCKWHEAT for fall seeding, as an inlay, preparatory to the wheat crop.

TURNIP SEEDS, of different kinds and of the best quality. Farmers and Gardeners will find it to their advantage to call and supply themselves liberally of this seed, to supersede in some measure their loss occasioned by the drought. Also BIRD SEED of every kind.

All orders by mail or otherwise, for CASH or good REFERENCES, will be faithfully and duly executed, with despatch. FARM and GARDEN TOOLS of all kinds on best terms, furnished by
THOMAS DENNY,
au 21 4t Grant street, near Pratt street.

FOR SALE,

A short horn bull, YOUNG REGENT, sired by Dr. Hosack's bull Malcolm, and his dam is believed to be a full blood Durham short-horn. Young Regent is handsomely marked with white and brown spots, of fine form and size, about 3 years old last spring; his calves are fine, as may be seen on this farm. He will be sold a great bargain, if an early application is made to

ROBT. SINCLAIR,
se 11 3t Clairmont Nursery, near Baltimore.

DURHAM & DEVON BULL.

Forsale, a young bull, 18 months old. He was got by a full bred Durham bull of the strain of Col. Powel, out of a full bred Devon cow. His color is a strawberry roan shewing his affinity to the blood of his sire. His pedigree will be warranted, and his price is \$75, cash on delivery.
EDWARD P. ROBERTS,
Editor Farmer & Gardener.

se 11

A THRESHING MACHINE FOR SALE.

An endless Chain Threshing Machine, which was over 4 years in use, will be sold for \$100. The machine is in good order, is approved of by its present owner, and only sold because it is too small for his crop of wheat. It is competent to get out from 40 to 60 bushels of wheat a day, and would suit a small farm admirably well, as it does clean work, and is easily kept in repair.

Applications by letter, post paid, to be made to
EDWD. P. ROBERTS, Baltimore, Md.

se 11

3t

SPLENDID BLOODED STOCK FOR SALE.

The proprietor of Covington farm will dispose of the following fine bulls on reasonable terms, viz.

One bull two and a half years old.

One do. six months old.

of the improved Durham short horn breed; the dam of the first was got by the celebrated bull Bolivar; for size, form and beauty they are not surpassed by any animal in the state.

Three Devon Bulls, one of which is seven years old next spring, and the largest Devon in the State. The Devons are from the stock of the late Wm. Patterson, and of undoubted purity.

Two half Devon bulls.

Two bulls half improved Durham short horn, and half Devon.

One bull, half Alderney and half Holstein.

These fine animals may be seen at Covington farm, near Petersville, Frederick county, Md. on application to James L. Hawkins, Baltimore, or to

se 11 f FREDERICK EBERT, Manager.

FARMERS' REPOSITORY OF AGRICULTURAL IMPLEMENTS AND EASTMAN'S CYLINDRICAL STRAW CUTTERS IMPROVED.

THE Subscriber informs the public that he has secured by letters patent his late and very important improvements on his Cylindrical Straw Cutter, by which improvements they are made more durable and easier kept in order. All the machinery being secured to an iron frame the shrinkage, wear and decay of wood is avoided. The feeding part of his improved machine is upon an entire different principle from the former machine; far more durable, requiring neither skill or care to keep it in order. These machines are so constructed as to make the freight on them less than half what it cost to ship the former or wood machines, an important desideratum to purchasers living at a distance; and I now offer it to the public upon the credit of my establishment as the most perfect machine in existence for the same purpose. They are also adapted to cutting rags for paper making, and for cutting tobacco as manufactured by Tobaccoists, &c.

I also keep these machines on hand made as heretofore with my new feeding machinery attached to them; and also a general assortment of Agricultural Implements, as usual. Elliott's Horizontal Wheat Fans, and Fox & Bolland's Threshing Machines are both superior articles.

My stock of Ploughs on hand are not equalled in this city either for quality, quantity, or variety. I have a large assortment of Plough Castings at retail or by the ton, and having an Iron Foundry attached to my establishment can furnish any kind of Plough or Machine Castings on reasonable terms and at a short notice.

All repairs done with punctuality and neatness. On hand, a few Patent Lime Spreaders, Horse Powers, &c. &c.

Also just received, a fresh supply of Landreth's superior Garden Seeds. In store, superior Timothy and Orchard Grass Seed and Seed Oats. All implements in the agricultural line will be furnished by the subscriber, as good and on as reasonable terms as can be had in this city, with a liberal deduction to wholesale purchasers. Likewise will receive orders for Fruit Trees from Mr. S. Reeves' Nursery, New Jersey.

JONATHAN S. EASTMAN,
Pratt street, Baltimore,
Between Charles & Hanover sts

Feb 20

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every day

	PER	FROM	TO
BEANS, white field,.....	bushel.	1 25	
CATTLE, on the hoof,.....	100lbs	7 00	8 50
CORN, yellow.....	bushel	88	90
White.....	"	85	86
COTTON, Virginia,.....	pound	9	11
North Carolina,.....	"	9 1/2	11
Upland,.....	"	9 1/2	11
Louisiana—Alabama.....	"	11 1/2	12
FEATHERS,.....	pound.	45	50
FLAXSEED,.....	bushel.	1 12	
FLOUR & MEAL—Best wh. wh't fam.	barrel.		
Do. do. baker's.....	"		
SuperHow. st. from stores	"	7 12	7 25
" wagon price,	"	6 75	
City Mills, super.....	"		7 37
" extra.....	"	7 75	8 00
Susquehanna,.....	"		
Rye,.....	"	4 50	4 75
Kiln-dried Meal, in hhd.	hhd.	19	
do. in bbls.	bbl.	4	
GRASS SEEDS, wholes. red Clover,	bushel.		
Kentucky blue.....	"	2 50	3 00
Timothy (herds of the north)	"	2 25	2 50
Orchard,.....	"	2 00	2 50
Tall meadow Oat,.....	"		3 00
Herds, or red top,.....	"	90	1 00
HAY, in bulk,.....	ton.	12 00	16 00
HEMP, country, dew rotted,.....	pound.	6	7
" water rotted,.....	"	7	
HOGS, on the hoof,.....	100lb.	6 75	7 00
Slaughtered,.....	"		
HOPS—first sort,.....	pound.	9	
second,.....	"	7	
refuse,.....	"	5	
LINE,.....	bushel.	32	33
MUSTARD SEED, Domestic, —; blk.	"	3 50	4 00
OATS,.....	"	35	38
PEAS, red eye,.....	bushel.		1 12
Black eye,.....	"	1 00	1 12
Lady,.....	"		
PLASTER PARIS, in the stone, cargo,	ton.	3 87	6 00
Ground,.....	barrel.	1 50	
PALMA CHRISTA BEAN,.....	bushel.		
RAGS,.....	pound.	3	4
RYE,.....	bushel.	75	85
Susquehanna,.....	"		none
TOBACCO, crop, common,.....	100lbs	4 00	4 50
" brown and red,.....	"	4 00	6 00
" fine red,.....	"	5 00	8 00
" wrappery, suitable	"		
for segars,.....	"	10 00	20 00
" yellow and red,.....	"	8 00	10 00
" good yellow,.....	"	8 00	12 00
" fine yellow,.....	"	12 00	16 00
Seconds, as in quality, ..	"		
" ground leaf, ..	"		
Virginia,.....	"	4 50	6 00
Rappahannock,.....	"		
Kentucky,.....	"	5 00	8 00
WHEAT, white,.....	bushel.	1 50	1 65
Red, best.....	"	1 48	1 53
Maryland.....	"	1 40	1 48
WHISKEY, 1st pf. in bbls.....	gallon.	31 1/2	32 1/2
" in hhd.	"	31	
" wagon price, ..	"		bbls
WAGON FREIGHTS, to Pittsburg, ..	100lbs	1 75	
To Wheeling, ..	"	2 00	
WOOL, Prime & Saxon Fleeces, ..	pound.	40 to 50	20 22
Full Merino,.....	"	35	40 18 20
Three fourths Merino,.....	"	30	35 18 20
One half do.....	"	25	30 18 20
Common & one fourth Meri.	"	25	30 18 20
Pulled,.....	"	28	30 18 20

A DURHAM BULL.

For sale, a superior Bull—he is of fine size and unexceptionable pedigree, which will be given next week—he comes from a strain of deep milkers, and is himself the sire of several fine animals. Price \$500. je 26 3t

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,.....	barrel.		
BACON, hams, new, Balt. cured....	pound.	15	16
Shoulders,.... do.....	"	13	14
Middlings,.... do.....	"	13	14
Assorted, country,.....	"	14	
BUTTER, printed, in lbs. & half lbs.	"	31	
Roll,.....	"		37 1/2
CIDER,.....	barrel.		
CALVES, three to six weeks old....	each.	5 00	6 00
Cows, new milch,.....	"	25 00	40 00
Dry,.....	"	12 00	15 00
CORN MEAL, for family use,.....	100lbs.	1 75	
CHOP RYE,.....	"	1 75	2 00
EGGS,.....	dozen.	12 1/2	
FISH, Shad, No. 1, Susquehanna,	barrel.	9 75	10 00
No. 2,.....	"	9 50	
Herrings, salted, No. 1,.....	"	4 50	4 62
Mackerel, No. 1, ————No. 2	"		
No. 3,.....	"		
Cod, salted,.....	cwt.	3 25	3 37
LARD,.....	pound.		11

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

U. S. Bank,..... par	VIRGINIA.
Branch at Baltimore,.... do	Farmers Bank of Virgi. 1
Other Branches,..... do	Bank of Virginia,..... do
MARYLAND.	Branch at Fredericksburg, do
Banks in Baltimore,.... par	Petersburg,..... do
Hagerstown,..... do	Norfolk,..... do
Frederick,..... do	Westchester,..... do
Westminster,..... do	Lynchburg,..... do
Farmers' Bank of Mary'd, do	Danville,..... do
Do. payable at Easton,.... do	Bank of Valley, Winch. par
Salisbury,.... 1 per ct. dis.	Branch at Romney,.... par
Cumberland,..... par	Do. Charlestown,.... par
Millington,..... do	Do. Leesburg,.... 1
DISTRICT.	Wheeling Banks,.... 3 1/2 a4
Washington,..... } Banks, 1p.c.	Ohio Banks, generally 5a6
Georgetown,..... } Banks, 1p.c.	New Jersey Banks gen. 3
Alexandria,..... } Banks, 1p.c.	New York City,.... par
PENNSYLVANIA.	New York State,.... do a 1/2
Philadelphia,..... par	Massachusetts,.... 1 1/2 a2
Chambersburg,..... 1/2	Connecticut,.... 1 1/2 a2
Gatysburg,..... 1/2	New Hampshire,.... 1 1/2 a2
Pittsburg,..... 2 1/2	Maine,.... 1 1/2 a2
York,..... 2 1/2	Rhode Island,.... 1 1/2 a2
Other Pennsylvania Bks. 2	North Carolina,.... 3a2 1/2
Delaware [under \$5].... 4	South Carolina,.... 4a5
Do. [over \$5]..... 1 1/2	Georgia,.... 5a5 1/2
Michigan Banks,..... 10	New Orleans,.... 7a8
Canadian do,..... 10	

TO THE PUBLIC.

Try the New Agricultural Establishment in Grant-street, next door to Dinsmore and Kyle.

Every article warranted to be first rate. The subscribers, grateful for past favors, take this early opportunity of returning their thanks to their customers and the public in general, and beg leave to inform them that they are now provided with a very extensive stock of newly manufactured AGRICULTURAL IMPLEMENTS, suitable to meet the call of Farmers, Gardeners, Merchants, Captains of vessels, and others, viz: 1000 Ploughs, assorted sizes, from \$4 to \$15 each, comprising of the old common Bar Shear, Winand's Self Sharpener; Woods & Freeborn's patent, all sizes, "Davis," "Sinclair & Moore's" improved Hill Side Ploughs, highly esteemed for turning the furrow down hill, with wrought or cast shears; Wheat Fans, of various sizes and patterns, from \$15 to \$50 each, warranted to separate the garlic from the wheat; Corn Shellers, from \$12 to \$20; Cutting Boxes, from \$7 to \$50 each; Corn and Tobacco Cultivators, large and small; Expanding do., Wheat Cradles warranted to have fingers of the natural growth, and Grass Scythes, &c. &c.; Castings, of all descriptions and patterns, by the lb. or ton, to suit customers, allowing a liberal discount to merchants buying to sell again—all of which will be furnished on the most pleasing terms and every article warranted to be of the best quality, in proportion to the cost price. All orders by mail or other-

wise shall be duly attended to with the greatest despatch.

We would particularly call the attention of Country Merchants and others, wishing to purchase agricultural implements to sell again, to the fact, that we will furnish them with articles on better terms than they can be supplied at any other establishment in the city. Our assortment is complete and as varied as that of the most extensive concern in Baltimore.

We have also connected in its operations with the above branch of business a complete assortment of FIELD AND GARDEN SEEDS, kept by Thomas Denny—Also Garden and Farm Tools, of various sorts and of the choicest collection, which will enable our customers to have filled entire all orders in the Agricultural and Seed Departments, mh 26 JOHN T. DURDING & Co.

MORUS MULTICAULIS TREES FOR SALE.

The Queen Ann's County Silk Company, near Centerville, Queen Ann's county, Eastern Shore of Maryland, have for sale from 20 to 30,000 MORUS MULTICAULIS TREES, which they will contract to deliver in Baltimore this Fall or the next Spring. Persons wishing to purchase can be supplied with any quantity not exceeding the above amount. All communications post-paid will be attended to. P. B. HOOPER, aug 28 3t Pres't of Q. A. C. Silk Company.

IMPROVED DURHAM SHORT-HORNS.

Early in October next, Mr. Whittaker's 2d sale of pure improved Short Horns, will be held at Powelton, near Philadelphia. Due notice will be given of the day of sale, when pedigrees in detail will be furnished.

The subscriber is authorized by Col. Powel to state that all the best cattle which he has at any time imported, and the improved Short-Horns, which he considered the best in England, were either in Mr. Whittaker's possession, or had been derived from his fold. In this sale, Col. Powel has not the slightest interest.

C. J. WOLBERT, Auctioneer.

aug 28

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MULBERRY TREES.

200,000 genuine Mulberry Trees, and as many more as may be wanted, of the most improved kinds—

Consisting of the best selected varieties now in use, for cultivation, feeding worms, and making silk;—being acclimated to this country, and adapted to either warm or cold climates, affording a rare opportunity for Companies or individuals to be supplied, from the most extensive collection of mulberry trees ever seen in any village within the United States.

Autumn is decidedly the best time for removal, and orders left with

Messrs. I. B. Colt, Sec'y of the Connecticut Silk Manufacturing Company, Hartford; Alonzo Wakeman, at the office of the American Institute, No. 187 Broadway, N. Y.; Thomas Lloyd, Jr. No. 236 Filbert street, Philadelphia, Pa.; Luther I. Cox, Baltimore, Md.; B. Snider & Co. Savannah, Ga.; Bliss Jenkins & Co. Mobile, Al.; James Lyman, St. Louis, Mo.; Case & Judd, Columbus, O.; G. Harwood, Rochester, N. Y.; and the publishers of this advertisement, or with the subscriber, in Northampton, Mass.

Orders left with the above gentlemen will be promptly attended to, and each will be furnished with samples of the foliage.

Several valuable farms may be had with or without Mulberry plantations. Apply at the office of

D. STEBBINS.

Northampton, Aug. 22, 1888.

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au 28

TURNIP SEEDS.

5000 lbs. Turnip Seeds of first quality of the following kinds, will be supplied at the very lowest wholesale rates; which will enable venders to make large profits in sagli by the pound, and far larger when selling in smaller parcels.

Purple topped Ruta бага or Yellow Swedish Turnip, White flat Field, White Norfolk, Early White Dutch, Yellow Dutch, Yellow Flat Field, Yellow Abordeen, Large Yellow Bullock, Long Tankard, Yellow Stone, White Stone, Yellow Maltese, Dalo's New Yellow Hybrid, Swan's Egg, Red top or Red Round, Green top or Green Round, and others.

N. B. 600,000 Chinese Morus Multicaulis Trees, 3 to 6 feet high, deliverable in October—and 200,000 Morus Expansa, Brussa, and other choice varieties.

WM. PRINCE & SONS,

july 17

3t

Flushing, New-York.

THE FARMER & GARDENER

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, E. P. ROBERTS AND SAMUEL SANDS—EDITED BY E. P. ROBERTS.

No. 21.

BALTIMORE, MD. SEPT. 18, 1838.

Vol. V.

THIS publication is the successor of the late
AMERICAN FARMER,

and is published at the office, at the N. W. corner of Baltimore and North streets, over the Patriot office, at two DOLLARS AND FIFTY CENTS per annum, if paid within one month from the time of subscribing, or \$3 if after that time. All letters to be post paid.

BALTIMORE, TUESDAY, SEPT. 18, 1838.

We would barely recommend to farmers to cut up their corn-stalks before they become too dry for feed for their cattle the coming winter. If cut off while the sap is unexpended and carefully preserved, they make when cut up an excellent food—and if steamed, are equal to hay.

We intended to have given a description of *Hussey's Horse Reaping Machine* in this number, but are compelled for want of room to omit it. In our next it will appear.

A Rain at last—On Wednesday last we were blessed with a most delightful rain of about 24 hours' duration, and while we return thanks to its kind Author for favoring us with it, we may be permitted to say that it will do infinite good to many fall crops. Its influence already upon grass and vegetation generally, is visible to every eye, and every heart should be filled with gratitude for a gift so replete with blessings. We think that the average quantity of rain which fell was about six inches.

LARGE SALE OF DURHAM AND OTHER CATTLE.

We observe by an extra from the Pittsburg (Pa.) Gazette that the Hon. *Harmar Denny*, intends selling by public auction on the 26th inst. at his *Springfield Farm*, 1½ miles from Pittsburg, his extensive herd of full bred improved short-horn Durhams, as also several grades, admixtures between the Durhams and other highly approved breeds. The entire herd consists of 45 head of cattle, many of them combining in their pedigrees the best blood of Europe and America. Among them we noticed, in looking over the list, three old acquaintances, viz. No. 1. *Young Buckingham*, a creature of fine size, generous blood and noble bearing—an imported full bred Durham—No. 2. *Cowslip*, a full bred Durham cow; she is an animal of majestic port, exquisite points, and

massive proportions—and No. 3. An Ayrshire cow of great symmetry of form. The above cattle we sold to Mr. Denny as the agent for their importer, and take pleasure in saying that better animals, whether lineage or appearance are considered, are rarely to be met with, and we trust that for these, as well as for the remainder of his large herd, he will find liberal prices. But before we close this notice, we would be permitted to express our sincere hope, that we are not to receive this disposition of Mr. Denny's stock as the evidence of his retiring from the honorable fraternity of breeders, as we should unfeignedly deplore the loss of one so eminently qualified as he is to promote the good cause.

DUTTON CORN.

Mr. *Lyman Reed* presented us about two weeks since with a very fine ear of Dutton corn, completely ripe, which was planted on the 21st June, and gathered on the 31st of August. This corn, it will be seen, was matured in 71 days from the time of planting. When handed to us it was hard enough for grinding. The ear is well filled, and an excellent sample of its peculiar variety. The usual period of its ripening is 90 days, but we presume in the intense heat and long continued drought of the summer we are to look for the causes of its so early perfection.

BADEN AND MERCER CORN.

We received some days since from Mr. W. C. Wilson, of Baltimore city, two ears of corn, then well ripened, and fit for domestic use, of the above varieties. They are both very good looking, but the last named is by far the largest and finest, being a perfect white and flinty withal, and as we believe an excellent meal corn. As the subjoined note of Mr. W. explains the time of planting each kind as well as their respective yields, we shall content ourself with observing, that notwithstanding the early period at which the Baden corn has come to maturity this season, we believe it a late corn, and that unless planted very early, will not in ordinary seasons ripen nearly all its product. We planted three acres of it last year, and although the lot would have averaged 3 ears to the stalk, not more than one-third of it ripened fully. Wherever it can be put in by

the middle of April, we believe that in good strong land, well manured, it will give a very large yield; but if planted in May, in five seasons out of seven we feel assured it will be caught by the frost. By experience we can say that the Mercer corn is at least ten days earlier.

"No. 1 is a sample of the Baden corn sown on the 6th May; this will average 3 ears to each stalk—if the season had been favorable the average would have been 6 ears, as many of the stalks have 8 or 10 ears, all of which did not fill.

"No. 2 is the 'Mercer,' sown about the 1st May—this will average 2 ears equal to the sample; if the season had been favourable, the average judging from the young ears which did not fill, would not have gone above 3 to each stalk—The greatest number of ears put forth on the Mercer is 5, of the Baden 10.

"The Baden was better exposed to the sun, which probably caused it to ripen sooner than the other.

"There is a field of 5 or 6 acres of the Baden a few miles from this, which will average from 3 to 4 ears."

MORUS MULTICAULIS TREES.

We find the following notice of this invaluable species of the Mulberry in the Philadelphia "*Saturday Evening Post*," of the 8th inst., and seize the occasion to say that our country is indebted to the forecast of our fellow citizen, *Gideon B. Smith*, Esq., more than to any one else, for the discovery of its use in the feeding of silk worms, as soon after its introduction into Europe he procured a plant of it and tested its adaptation to such purposes. Believing that it will ultimately add millions of dollars annually to the value of our agricultural products we should do violence to our own sense of his high deservings were we to omit noticing his participation in this good work.

"MORUS MULTICAULIS."

This popular shrub appears to have created much discussion and interest in this city and vicinity for the last fortnight.

The feeling may be expressed as in a state of high fever. Some very prudent and cautious persons have pronounced it for months past like a "merino speculation," but the merino excitement, never raged half so universally as does this preliminary of the Silk Culture.

We have received many letters asking for numerous details respecting price, mode of culture, sellers, silk worm eggs, &c. &c. &c. which to answer correctly would occupy a large portion of

our time. We have given applicants the Doctor's advice to a valetudinarian, "*take advice*," subscribe for the S. E. Post, the Silk Grower, published in this city, by Charles Alexander, or the Silk Culturist, published by W. C. Comstock, at Weatherfield, Conn. to obtain the current news, details of culture, and instructions generally.

The sales of mulberry trees have been very brisk for weeks past, even to the amount of several hundred thousand dollars. Many culturists who were disappointed in obtaining trees last year—or postponed purchasing on the ground, that plants would be a drug and "as cheap as a broom" this year, have now taken "time by the forelock," and bought largely at higher prices than when they were "so very scarce and dear" six and nine months ago.

The prices are so various that it is nearly impossible to give exact estimates. Buyers say the price is 50 cents per tree,—the sellers, that it is 75 cents.

Within a few days trees have been offered at 15 cents, 17 cents, and 20 cents per foot, the root with one inch of stalk being counted as one of the feet, and some fine plants have been sold at \$1.00 and \$1.50 the tree. The general belief is, that nearly all the trees for sale within 40 miles of this city have been sold. The growers generally choosing to keep a large stock on hand for seed the ensuing season; and well they may like to continue propagating, for in many instances their profits have reached 1000 per cent. while others who have not been so fortunate in their cultivation or soil, have netted 500 per cent. within the last six months.

To those of our friends who are disposed to go permanently into the cultivation of silk, we would say, "*Do not depend upon the multicaulis alone.*" Although it will probably be a good article for production and a sale for two or three years longer, yet you ought to supply yourselves with hedges of the White Mulberry, the improved Alpine Mulberry, or the Broussa, which are hardy plants, and will always prove valuable standard trees; and some of these varieties have nearly as much foliage as the Multicaulis itself.

The culture of silk, although it may not produce such immense profits as the temporary growing of the Mulberry, will no doubt be a *lucrative* and *permanent* business, giving pleasant and profitable employment to the infirm, the females and the children, who have at present little to do, or a very small remuneration for light labor. We have been assured by a practical man, that \$300 per acre may be depended on, as the proceeds of proper feeding of Silk Worms and making sewing silk. Although this may be too liberal an estimate, (at least till experience shall guide enterprise,) yet from a calculation of the number of cocoons which may be raised from an acre of ground, planted with hedges of mulberries, it would not appear extravagant.

Do not attempt to feed Silk Worms till you are sure of having twice as much foliage as they will be calculated to require. Feed a few at first—experiment—and when you are acquainted with the wants of the worm, and the treatment required—then "go the whole figure." No danger of over-stocking the silk market, until our population shall extend beyond the Rocky Mountains.

We have discontinued our quotations of flour and grain to-day, because the market is so feverish and unsettled to make it unsafe to give any quotations that could be relied upon. In consequence of the unfavorable news of the state of the weather in England, and the danger to be apprehended to the harvest—the grain being ripe and incessant rain prevailing—prices are on the rise here, and there is no telling at what they will settle down. *Best white wheat* sold yesterday at \$2—*best red* was held at \$1.90, and ordinary at \$1.85. Some sales of corn were effected at \$1, and oats 45 cents.

We are gratified to learn that our old friend and distinguished breeder, Mr. John Barney, of Philadelphia, so long and so well known to the breeding community, intends availing himself of the coming sale of Durhams to be held at *Powelton*, near Philadelphia, by Mr. Whitaker, to offer a portion of his fine stock of Durhams as also some of his incomparable *Bakewell* sheep. The Durhams consist of *Bulls, Cows, Heifers and Calves*, all of pure blood and good points.

While we have pen in hand, we would remark to those of our readers who may desire to procure a first rate *Bakewell* or *Leicester* ram, that Mr. Barney has on his estate near Philadelphia, a number of them of very superior quality both of 1 and 2 year olds, and as this is the season when breeders should be providing themselves, we seize the occasion to say that there are not better bred sheep of the kind to be had any where. The stock is not only *pure*, but from the careful manner in which Mr. Barney breeds, there is no possibility of their retrograding either in points of carcass or integrity of constitution; for if *Bakewell* had the skill to *form* them, so has our old friend Barney the genius to *keep them up* to the point at which they were left by the late Mr. *Bakewell*, or if necessary to create a *new* animal out of the old *materiel*.

THE CORN CROP OF THE LOWER WESTERN COUNTIES OF MARYLAND.

We publish with pleasure the following letter from a highly esteemed and respectable correspondent, of Charles County of this state. Its object, as the reader will perceive, is to correct an erroneous statement which we recently copied from the *Baltimore American*; and while we regret the existence of the necessity for the correction in question, we must be permitted to remark, that there are no gentlemen in the country, connected with the newspaper press, who are more conscientious, or take more care in giving publicity to

statements of all kinds, or when in error take greater pleasure in making the *amende honorable*, than do the editors of the *American*.

To the Editor of the Farmer & Gardener.

HARRIS' LOT, Charles co. Md. Sept. 10, 1838.

Dear Sir,—In your valuable paper of the 28th ulto. I have just observed an important, though erroneous extract, from the *Baltimore American*, in allusion to the "Corn Crop, and abundant rains in the lower counties of the Western Shore of this State." Permit me to assure you, your numerous readers, and particularly the *American's* informant, that the visitation of *Providence* stamps the extract with an unparalleled and melancholy drought. My facts, "which are stubborn things," are obtained by visiting each section of this and St. Mary's county. There is a narrow strip of land, from about Port Tobacco in this county, running eastwardly through St. Mary's somewhat below Leonard Town, that has received rain enough to produce about half a crop of corn; while the more fertile low lands on the *Patuxent* and *Potomac* rivers up through *Nanjemoy, Pomonkey, and Boyan-town* districts, that will not yield half enough for family consumption. We have had no rain to benefit pastures since the first of last month, and not enough to benefit the corn crop since the first of July,—the best of springs in many places have failed; leaving families and their stock destitute of the necessary supply of water, and consequently dependent upon their more fortunate neighbours. I would allude at length to the entire absence of dews—even upon the 'salt river's edge,' to aid the parched and injured Tobacco crop, as also, the limited yield of wheat—but my object being only to correct a statement so prejudicial to each member of the corn consuming class, that I forbear; hoping the *American* will give enough of the above to place facts as they really are—that paper reaching hands which yours may not.

Very respectfully, dear sir,

Your obed't serv't.

THE DROUGHT AND THE CROPS.

In this section of the State the drought continues. Vegetation of every description is suffering to an inconceivable extent. It is thought that scarcely half a crop of corn will be made in *Davidson*, and perhaps the average crop of the State may not exceed that amount. Farmers should be busy in preparing their ground for large crops of turnips and rye, with a view of getting their stock through the winter. The continued dry weather has for the most part, prevented the turnip seed that have been put in the ground from coming up; but it is not too late yet, if we have rain in time. Large rye crops, if the sowing take place sufficiently early in the season for winter pasture, will greatly facilitate the winter operations of the stock farmer.

In Kentucky, the corn has suffered somewhat from drought, particularly in some portions of the Green river country, but in other sections of the State, the crops were never better, and it is thought there will be about an average yield from the whole State.

On the subject of the Alabama crops we find the following remarks in the *Huntsville Advocate*: "THE CROPS AND THE SEASON.—On a recent

excursion, through the counties on the Tennessee river, we were sorry to see in many places short crops of Corn and Cotton, owing to the excessive heat and drought. The neighborhood in the immediate vicinity of Huntsville, we believe, has suffered less than any other, and that about Courtland, Lawrence county, more than any we passed through.

Near Moorsville, the Corn is small and the Cotton still smaller, which is beginning to open in many of the fields. The average crop of both in this Valley will be greatly below that of ordinary years.

We learn, however, from well informed persons, recently from the Southern parts of Alabama and Mississippi, that the Cotton crops are generally very fine, much larger than the present laborers can harvest; and the opinion is confidently expressed that owing to the increased quantity of land in cultivation and its amazing productiveness, the crop of 1838 will be equal to that of 1837. Planters who have estates both in North Alabama and the South are now fully convinced of the inexpediency and unprofitableness of growing Cotton in this Valley, and are turning their attention in good earnest to more diversified farming.

Sept. 8. *Nashville Banner.*

From the (Phila.) United States Gazette.

DROUGHT AND HEAT.

The summer of 1793 was excessively hot and dry. The average heat was within one and a half degrees of the present summer. The drought of '93 was much more extensive. The severity of the present drought has been east of the Alleghenies, west of N. York, north of Maryland,* and south of Lehigh and Pottsville coal mountains. The summers of 1807, 1825 and 1831 were also excessively hot and dry, but the heat did not continue so oppressive, for such a length of time, without change. The drought was severe in each of those summers, but particularly in 1825, in this vicinity, it was very nearly as severe as the present year. The month of August was rather more so.

The last steady rain of a day was on the 6th of June. The cheering rain of yesterday commenced between twelve and one o'clock in the morning.

We have long remarked that severe winters almost invariably either precede or follow hot and dry summers. C. P.

[*Maryland was not exempt, but suffered severely.—Ed. F. & G.]

THE DROUGHT.

The following article describes as existing in Fauquier county, Virginia, the identical unremitting and still continuing drought which pervades all this neighborhood, to the almost total destruction of the corn and tobacco crops, and of the other late summer productions of the gardens as well as of the fields:—*Nat. Intel.*

FROM THE WARRENTON (VA.) TIMES OF SEPTEMBER 8.

Somehow or other, we are still haunted by the gruff, sullen beat of the engine as it shook us heavily up the Ohio on our return from the West. It has fastened on our nervous system, and commingles with our every pulsation. Every sort of sound runs into this horrid beat—the clock ticks

like it, the cock crows like it, even our children cry like little engines! In this feverish state, we have not failed to mark with deep sensibility the contrast between the arid, ashy, deadly curse with which this country has been scourged; and the bold, fruitful, vigorous green of the country we have just returned from. It is the sinewy towering tread of manhood, buoyant with life and action, contrasted with the shadowy frame of age, bent to the earth in feebleness.

For more than one hundred days has the sun looked upon us with a consuming countenance; and during that whole period not one friendly cloud has obscured his disk or shielded us from his deadly gaze. Our rivers are gone, our water-courses are dried up, our wells have sunk. The memory of our oldest men does not recall the equal of this heavy calamity! and, as if to show us that the phials of wrath are not emptied, the sun yet stares upon us with undying energy. High cold winds sweep over our blasted fields, and like messengers of desolation, penetrate the bowels of the earth, in search of the puny, feeble life which yet remains to vegetation.

Amidst this destruction of their substance, the energy of our farmers is in no way damped. Their countenances are unchanged, and bespeak the same confidence in their own industry, and their unshrinking faith in the benignant justice of Heaven. In all directions unusual preparations of fallow are making. They will plough and they will sow; the balance they leave with confiding hope to the high behests of Providence.

HORTICULTURAL—THE PEACH, &c.

July and August are the months for budding (or innoculating) trees, this should now be done for improving the varieties of the Peach, Nectarine, Apricot and Plum, (Apples, Cherries, &c., do better engrafted) this should be done thus: select a thrifty growth of this year, then on a smooth part of the bark cut a vertical slit through it about one and a half inch long, the bark is then to be raised by the flat pointed end of your budding knife, (if the sap does not permit the bark to raise readily the bud will not take,) the bud must then be put up into the opening under the bark and a little of the end protruding over the transverse cut must be cut off even, whereby it will fall in and fit snugly.

In the first place provide yourself with good prominent buds from bearing trees, on good healthy shoots and some bas matting, (Russia matting) which may be usually found in any of the stores in town or country; this must be separated into strings, like tape, and put into water to soak a few minutes, then with a sharp knife take off a bud by beginning to cut half an inch above the bud, include a little of the wood, and pass the knife down about an inch below the bud.

When the bud is inserted as above directed, of the Bass string about a foot long, begin by laying the middle of it across the stock directly over the transverse cut, pass it round on each side, under and above the bud, till you cover the incision, then it may be left in this state till next spring (the growth of the tree may require it to be slackened,) or it may be taken off after the stock has ceased to grow, put two or three buds in each stock, and in the spring head down to the most

promising one by cutting off with a considerable slope, letting the knife pass out near the bud; use a sharp knife of proper size and one cut will serve.

By this method, with little trouble and no expense—save that of producing one good tree of each kind—you may fill your orchard with the finest kind of peaches; one bushel will be worth a cart load of miserable trash with which our market is supplied; to destroy the worm you have only to remove the earth from the stem and pour in boiling water—the presence of the worm is always known by the gum exuding.

Plough the ground, the peach will never succeed in grass; it requires a light sandy soil.

August 15, 1838.

J. L.

HARVESTING OF CORN.

As the season is approaching in which the farmer will commence the securing of the abundant crop of corn with which a bountiful Providence has blessed our country, it may be pertinent to the occasion to offer a few remarks upon the best mode of harvesting the crop.

Our Virginia ancestors and those who think it wise to plant and cultivate and gather as our fathers have done, pursue the old method; about this time they gather the blades below the ears of corn—after they consider the corn to be ripe they top the stalks and secure all the fodder in stacks for winter use.—In November they pull the corn and remove it to their cribs, where it is husked out at leisure. This mode is rapidly yielding in the stock districts to that first introduced among the graziers on the south branch of the Potomac. The farmers in the northern and middle districts of Kentucky, and in the Scioto valley of the Ohio, have generally adopted this latter mode; which is to cut the stalks, corn, fodder and all, and place them in shocks commonly embracing sixteen hills square.

I have seen the richest crops of many climates gathered, and there is no operation in husbandry so animating as that of cutting corn in the mode just mentioned. It is a most cheering prospect to see twenty acres of corn pass in one or two days, to a condition in which it is prepared to keep in the field during the winter. This remark is predicated particularly upon the plan of riddling the squares, instead of cutting the whole square at once. It will readily occur to any observing mind, that as corn does not ripen with any regularity, that if the entire square were cut at once, some of the corn will mould and sometimes even the fodder will be affected, if the cutting shall be followed by warm or wet weather. To avoid this contingency, some graziers commence with the process of riddling, that is, they select only part of the sixteen hills square as may be ripe—go through the fields in that way, and in ten days complete the cutting of the square. By this process several important advantages are obtained, the greatest amount of fodder is secured consistently with the paramount object of saving the corn, and a nucleus for the shock being formed by the first cutting in the square, the shock becomes settled and stands better during the winter. In the rich counties of Clark and Bourbon, they sometimes cut half the square on one side and then in ten days finish it, whilst many graziers in Fayette, Lincoln and Shelby, prefer the process of riddling.

In the course of October and November, these shocks are shucked out, the corn placed in cribs and two of the shocks placed together, or one placed on the ground and two other put around it. It is the opinion of practical farmers that the practice of cutting corn in this mode secures the greatest amount of corn fodder with the least expense, and is decidedly an improvement on the old Virginia plan, more especially when applied to the feeding of cattle or mules.—*Franklin Farmer.*

PREVENTION BETTER THAN CURE.

When we consider the time required to renovate and render productive, land once exhausted by continual and improper cultivation, and the expense and difficulty of the operation, it seems clear that the wisest course for the farmer would be, to adopt a system that would keep his land in good heart, and prevent exhaustion, and the consequent necessity of renovation. This can be done without difficulty, if the farmer commences aright.

By the rotation of crops, by using root crops with grain crops, by alternating green crops with white ones, there is abundant evidence that a farm can be kept in a productive state, and instead of exhaustion, be growing more rich and fertile.—Continual cropping will destroy the best soils. There must be change or rest; it is preposterous to talk of not understanding the reason of land growing poorer, while the suicidal course adopted by many of our farmers is persisted in.

The intervention of a growth of clover for a single year between wheat crops, though far preferable to the system of wheat after wheat, will not prevent this wearing out of the farm, or a field becoming tired of any particular crop. There must be a succession of plants that draw their nourishment from greater or lesser depths of the soil, as the tap-rooted after the fibrous; or plants that require from the earth different materials as food, such as the leguminous followed by the farinaceous. Clover is perhaps one of the best renovators of the soil; and plastered and ploughed in as a green dressing, it is one of the most valuable kinds of manure that can be applied.—Some experiments show that of well seeded clover of 2 years growth, the roots alone will weigh from nine to twelve tons to the acre, thus fully establishing its value, and the manner in which this plant enriches the soil. Farms properly treated from the first will never wear out, but their productive capacities will increase rather than diminish.

Those, therefore, who have farms which have not suffered from the evils of a course of cropping that has rendered much of the soil of the old settled states comparatively sterile, should be wise in time. The haste to be rich, which has led many of the farmers of Western New York, and other parts of the grain growing states, to grow a succession of white crops on the same field should be abandoned for a more rational course of proceeding, one which combines profits with permanent fertility, and shuns alike the old fashioned notion that grass land should never be ploughed, or the modern injurious practice that condemns our fields to the plough without intermission.—*Genesee Farmer.*

From Chaptal's Agricultural Chymistry.

MANURES.

[The nature and action of manures explained and illustrated by M. John Anthony Chaptal, Count of Chanteleup, Peer of France, member of the Institute, &c.]

(CONTINUED.)

When the dung is not of the usual consistency, as is the case of neat cattle during the spring and autumn, it ought to be employed immediately, as I have already stated; but if it be impossible to apply it to the fields while recent, it should be mixed with earths or other dry and porous substances which may serve as manures for the fields destined to receive it.

Upon nearly all our farms the dung of quadrupeds is exposed to the open air, without the protection of a shed, as soon as it is removed from the stables; and is thus washed by the rains, which carry off all the salts, urine, and soluble juices, and form at the foot of the mass a rivulet of blackish fluid, which is either wholly evaporated or lost in the ground. In proportion as fermentation advances, new soluble combinations are formed, so that all the nutritive and stimulating principles of the dung gradually disappear, till there remain only some weak portions of the manure, intermingled with stalks of straw which have lost all their goodness.

To remedy as much as possible an abuse so injurious to agriculture, it is necessary at least to dig a deep ditch to receive all the juices which flow from the dunghill in order that they may be used in the spring upon the common grass lands; or they may be preserved to water the grass lands with, after the first mowing. A large cask fixed upon a small cart, and which can be filled by means of a hand pump, is sufficient for this purpose. Beneath the tap of the cask must be fitted a narrow chest about four feet long, with the bottom pierced with holes, through which the liquor may be scattered. This mode of watering, when used after mowing, produces wonderful effects upon the crops the following year.

Before deciding upon the question, whether dung and litter should or should not be made to ferment, it is necessary to take into consideration the nature of the soil to be manured. If this be compact, clayey, and cold, it is better that fermentation should not have taken place, as two effects will be produced by the application of the manure in an undecomposed state. In the first place it will improve the soil by softening and dividing it, so as to render it permeable by air and water; and in the next place it will, whilst undergoing the successive processes of fermentation and decomposition, warm the soil. If, on the contrary, the soil be light, porous, calcareous, and warm, the thoroughly fermented manure, or *short muck*, as it is called by farmers, is preferable, because it gives out less heat, and instead of opening the earth, already too porous, to the filtrations of water, it moderates the flow of that fluid. Long experience has made these truths known to observing practical farmers.

When it is required to apply dung to any particular kind of soil, it is necessary that it should be used according to a knowledge of its qualities. The dung of animals bearing wool is the warm-

est; next, that of horses; whilst that of cows and oxen contains the least heat of any.

Soft or fluid animal substances change the most easily; and the progress of their decomposition is rapid in proportion to the diminution of the quantity of earthy salts contained in them. Their decomposition produces an abundance of ammoniacal gas. This circumstance distinguishes them from vegetable substances; the decomposition of which gives rise to the production of that gas, only as far as they contain a small portion of albumen. It is particularly to the development of ammoniacal gas, which, combined with gelatine, passes into plants, that we can attribute the wonderful effect produced upon vegetation by certain dry animal substances, of which we shall speak presently.

Next to the dung of animals, of which I have just spoken, the urine of horned cattle and of horses is the most abundant manure which can be used in agriculture, and it is not without regret that I see every day so little pains taken to collect it. I have already observed that in those countries where agriculture is conducted with the most ease and skill, all the stables are floored, and the bottoms of them gently sloping, so as to conduct all the urine into a reservoir, where the remains of rape-seed, flax, wild cabbage, human excrements, &c. &c. are thrown into it to undergo fermentation. In the spring, when vegetation begins to be developed, this fermented liquor is carried into the field to water the crops.

There are few animal substances of which the nature varies as much as that of urine; the quality of food or the state of health, produces a sensible change in it. The urine of animals is more or less abundant and active in its qualities, in proportion as their food is juicy or dry. Those which live upon dry fodder give less urine than those which are fed upon green herbage; but that of the first contains a greater quantity of salts than that of the last; and that which is produced directly by drink contains less animal matter than that which is secreted from the blood by the urinary organs. There are different states of individuals which may explain satisfactorily the disagreements in the results which have been given, by the numerous analyses which have been made of this fluid.

Mr. Brandt has found the urine of a cow to contain:

Water	65
Phosphate of lime,	5
Muriate of potash and of ammonia	15
Sulphate of potash	6
Carbonate of potash and of ammonia	4
Urea	5
	100

Messrs. Fourcroy and Vauqueline have extracted from that of the horse:

Carbonate of lime	11
Carbonate of potash	9
Benjoate	24
Muriate of potash	9
Urea	7
Water and mucilage	940
	1000

Analysis of human urine by M. Berzelius afforded:

Water	933
Urea	30.1
Uric acid	1
Muriate of ammonia, free lactic acid, lactate of ammonia, and animal matter,	17.4
	981.5

The remainder is composed of sulphates, phosphates, and muriates.

It may be seen from these analyses, that there is a wide difference in the urine of various animals, but that all contain salts which enter into plants, with the water by which they are held in solution; and draw in at the same time those animal portions, which like urea, are easily soluble, and can be decomposed without difficulty.

Amongst the principles contained in urine, there are some salts undecomposable by the digestive organs of vegetables; such are the phosphate of lime, the muriate and the sulphate of potash. These can serve only to excite and stimulate the organs; but the urea, the mucilage, the uric acid and other animal matters, must be considered as eminently nutritive. Urine in its recent state should never be employed as manure; it acts with too much force, and has a tendency to dry the plants; it should therefore be either mixed with water, or allowed to ferment.

Urine is very useful for moistening all those substances which enter into composts; it increases the fertilizing properties of each one of them, and facilitates the fermentation of those which need to be decomposed before yielding their nutritive qualities.

Urine, when combined with plaster, lime, &c. forms a very active manure for cold lands.

Bones have, at the present time, become, in the hands of the agriculturist, a powerful agent in fertilizing the soil. These parts of animals are principally composed of phosphate of lime and of gelatine. Those bones which are most usually employed, contain about equal quantities of phosphate and gelatine; those of the horse from thirty-six to forty; and those of the hog from forty-eight to fifty.

The bones of young animals contain more gelatine than those of older animals, and have a less compact texture. The bones of the feet of the elk, the roe-buck, stag, and hare, afford, upon analysis, from eighty to ninety per cent. of phosphate.

When bones are to be employed as a manure, they should be ground fine, and thrown into a heap to ferment. As soon as this action shall have commenced, so as to give out a penetrating odor, the mass should be spread upon the earth, and be afterwards mixed with it. When seeds are sown in furrows, it is a good method to place some of the ground bones in the furrows with them.

In some countries the fat and a great part of the gelatine are extracted from bones, by boiling them in water, before selling them for agricultural purposes. But by this operation they are deprived of a great part of their fertilizing powers. Upon carefully observing the appearance of a mass of bones under fermentation, I found the surface of a part of them to be covered with a thin coating of an unctuous substance, sharp and biting to the taste. This appeared to me to be formed by the

combination of gelatine with ammonia; the last being always developed during the decomposition of all animal substances. The observations of M. D'Arcet, to whom we are indebted for a very valuable work upon gelatine, support this opinion.

It is possible, that, when the ground bones are employed without having been first submitted to the commencement of a fermentation, the gelatine is gradually decomposed in the ground, and the same result at length produced; or, we can conceive that water, acting upon the bones, will dissolve the gelatine, and transmit it to plants; and in both these cases the influence of the bones upon vegetation is very great, whether it be considered as a purely nutritive manure, or in the double connexion of a nutritive and stimulating substance.

When bones are calcined in a close vessel, they yield oil and carbonate of ammonia; the proportion of the phosphate is not sensibly diminished; but the gelatine is decomposed. There remains after the operation from sixty-six to seventy-two per cent. of the weight of the bones employed. This residue, broken and pulverized with care is of great use in the process of refining sugar.

After having been used in this process, and become impregnated with ox-blood and animal carbon, I have found it to be one of the best manures which I could employ for trefoil and clover. It should be scattered with the hand upon the plants, when vegetation begins to be developed in the spring.

Some of the dry parts of animals, as the horns, hoofs, and claws, approach closely to bones in the nature of their constituent principles; but the proportions of this vary prodigiously. In such parts, gelatine constitutes the largest portion; and for this reason they are more esteemed for manure than bones. M. Meral-Guillot has found but twenty-seven per cent. of phosphate of lime in the hoof of a stag. And M. Hatchette, by an analysis of five hundred grains of the horn of an ox, gained only one-fifth part of earthy residuum, of which a little less than one-half was phosphate of lime.

The clippings and parings of horses form an excellent manure, of which the effect is prolonged during a succession of years, owing to the difficulty with which water penetrates them, and the little tendency they have to ferment.

A very good manure is likewise formed from wool. According to the ingenious experiments of M. Hatchette, hair, feathers and wool, are only particular combinations of gelatine with a substance analogous to albumen; water can only dissolve them by means of fermentation, which take place slowly, and after a long time. One of the most surprising instances of fermentation that I have ever seen, is that of a field in the neighborhood of Montpellier, belonging to a manufacturer of woolen blankets. The owner of this land causes it to be dressed every year with the sweepings of his workshops; and the harvests of corn and fodder which it produces is astonishing.

It is well known that the hairs of wool transpire a fluid which hardens upon their surface, but which possesses the property of being easily soluble in water. This substance has received the name of animal sweat; the water in which wool has been washed contains so much of it, as to make it very valuable as a manure.

To be Continued.

From the Baltimore Patriot.

QUEEN ANNE'S SILK COMPANY.

MR. EDITOR.—I have seen several notices of the Queen Ann's County Silk Company published in the newspapers, which have not been strictly accurate. If you think the following statement will be interesting to your readers, and will subserve the great interests of the State, you are at liberty to publish it.

The Company was formed sometime in the winter of 1835-6, and in the spring of 1836, a farm was purchased for two thousand dollars, one thousand small *Morus Multicaulis* trees, without the lateral branches, were bought for three hundred and fifty dollars, and two thousand cuttings were obtained for 120 dollars. The cuttings failed to produce as many trees as was anticipated, owing in part to their having been too long out of the ground before they were received. In the spring of 1837 however, the Company sold more than trees enough to pay ten per cent interest upon the whole expenditure and planted out a large quantity of cuttings. In 1838 there were trees sold from the cuttings to the amount of about nine thousand dollars besides reserving for themselves seven thousand trees and about one hundred thousand cuttings. The Company will be able to sell this year and next spring from 20 to 30,000 trees. The stock of the Company at present consists of one hundred shares of fifty dollars per share, with the privilege to increase the capital to 20,000 dollars. Twenty-five hundred dollars have been paid in. The farm, stock, and a cocoonery one hundred feet by thirty, have all been paid for. One of the fields have been covered over with excellent shell marl, and a second field is expected to be covered over during the present summer.—After paying all the expenses of the establishment, from 5 to 6,000 dollars will be divided among the stockholders. The Company were offered yesterday \$8,000 for the farm and stock on it, which was promptly refused. A gentleman sometime ago sold ten shares upon which he had paid two hundred and fifty dollars for fifteen hundred dollars. Another sold 6 shares upon which he had paid twenty-five dollars per share for one hundred and sixty dollars per share. Another gentleman advertised 12 shares for sale on which he had paid three hundred dollars, and the next day was offered eighteen hundred dollars, which he refused; and asked upwards of 200 dollars per share. A member of the Company purchased in the spring of 1836 trees of the amount of about seventeen dollars for his own use; and sold trees last spring to the amount of more than one thousand dollars, besides planting a number of trees and cuttings. The same gentleman has been very successful in feeding silk worms. Two hundred of the cocoons raised by him weighed one pound, and seventy of the same weighed half a pound. Another gentleman of the Company purchased in 1836, for his own use, trees to the amount of twenty-two dollars and fifty cents, sold in the spring of 1838, trees to the amount of eleven hundred sixty dollars, besides reserving, for himself, three hundred trees and twenty-eight hundred cuttings. A merchant in Centreville, not belonging to the Company, purchased in the spring of 1837, from the Agent of the Company, sixty dollars worth of trees and

cuttings and sold in the spring of 1838 more than one thousand dollars worth. The great demand for trees has prevented the Company from feeding many worms; but the members of the body politic are sanguine of success in making the silk as soon as they shall have a sufficiency of trees to go spiritedly into the business.

It has been demonstrated by a great many experiments that the soil and climate of Maryland are peculiarly adapted to the growth of the Mulberry and for the rearing of silk worms; indeed it has been proved beyond a doubt that the United States may enter into the silk culture with the fullest confidence of success.—The silk business, we hope, is destined to give a new impulse to our State and prevent the emigration which has been going on for years. It promises to yield a greater profit with less trouble and expense than the Southern cotton plantations. Any one who will investigate the subject must come to the conclusion that every Marylander should feel a deep interest in promoting the silk culture. I would advise any one desirous to obtain information, to purchase 'Roberts' Silk Manual' published in Baltimore at 50 cents, and to take one of the Silk Periodicals,

A. STOCKHOLDER,

in the Q. A. County Silk Company.

Q. A. Co'ty, Aug. 16, 1838.

From the Genesee Farmer.

CATTLE.—DEVONSHIRE.

While it may be affirmed with great truth, that the present beautiful and superior breed of Improved Short Horns are strictly artificial, and while some fears may be justly entertained lest the valuable qualities for which they are so distinguished, have not become so fully constitutional as to be beyond the possibility of lapse,—we here bring to the notice of the farmer, a breed of cattle, scarcely inferior in quality to the Short Horns, and of which no apprehensions can be entertained that the type of these distinguishing qualities are evanescent, and not durably incorporated in the constitution and race.

The north of Devon has long been celebrated for a beautiful breed of cattle, in activity of work, and aptitude to fatten, unrivalled. The place where they are found in the greatest perfection, is in the vicinity of Portlock and Biddleford, along the Bristol channel in the county of Devon. From the earliest records the breed has here remained the same, or if not quite as perfect in general as at the present moment, yet altered in no essential point until the last thirty years. No persevering successful attempts to improve the general character of British cattle were made until within some fifty or sixty years; and the Devonshire farmers were so well satisfied with their herds that they were about the last to dream that their beautiful red cattle could be improved, and they did not bestir themselves in earnest until the high prices and improved forms of the Collings' Short Horns, convinced them that in estimating their advantages they were behind the age.

The most perfect specimens of the Devonshire cattle are found among the North Devons, and it is of these we shall speak. As the breed is of the middle horns, the horns should be neither too high nor too low; those of the bull tapering to the points, not very thick at the base, and of a yellow

or waxen color. The eye should be clear, bright and prominent, showing much of the white, and ought to have a circle of a variable color, but usually of a dark orange around it. The forehead should be flat, indented and small, for by the smallness of the forehead the purity of the blood is much estimated. The cheek should be small and the muzzle fine, and the nose should be of a clear yellow. The ox has a small head, singularly so relatively to the bulk of the animal, yet it has a striking breadth of forehead. Its neck is well adapted to the yoke or the collar; the horns are small and fine; the fore legs are wide apart, looking like pillars to support a great weight.—Angular bony projections are never found in a beast that carries much flesh and fat. A narrow chested animal can never be useful either for working or grazing.

The skin of the Devon of the pure breed, notwithstanding his curly hair, is very mellow, fine and elastic. Graziers know there is not a more important point than this. When the skin can be easily raised from the hips it shows that there is room to set fat below. The favorite color of the Devons is a blood red. The hair in some is curled, the curls running like ripples on water, and when dark giving a Mahogany appearance. If the hair is smooth it should be fine and glossy. Few of good blood have any white upon them, and the pure Devon is as uniformly red, as is the pure Short Horn red and white.

The comparative smallness of the Devon cow, is one of the most remarkable traits of their character. The bull is much smaller than the ox, and the cow proportionally smaller than either. This is considered somewhat of a disadvantage, as it is almost impossible to procure large and serviceable oxen, except from a *roomy* cow. Owing to their peculiar build, however, the Devon cow is more *roomy* than most other breeds of cattle of the same size, which in a great measure obviates the objection. The Devon cow is peculiarly distinguished for her full, round, clear eye, the gold color prevailing on the inside of the ear. The muzzle orange or yellow, but the rest of the face having nothing of black, or even of white about it.

The peculiar excellence of the Devonshire ox, is a quickness of action in working, which few horses exceed, and no other cattle can equal.—They have also a degree of docility and goodness of temper, and stoutness and honesty of work, to which many teams of horses cannot pretend. Mr. Youatt, who is great authority on the subject of cattle, thus describes their usual mode of treatment and aptitude to fatten.

The Devon steer is taken into work at about two years old; and they are worked until they are four to six; they are then grazed, or kept on hay, and in ten or twelve months, and without any further trouble, they are fit for market. If the grass is good, no corn, or cake, or turnips are required for the first winter; but of course for a second winter these must be added. The grazier likes this breed best, at five years old, and they will usually, when taken from the plough, fetch as much money as at six. Lord Somerville states, that after having been worked lightly on hill land for two years, at four years old they are brought into the heavy land of the vales, and used in hard work till six; and what deserves consideration is,

an ox must be thus worked to attain his largest size. If he is kept idle until he is five or six, he will invariably be stunted in his growth. Mr. Youatt, adds—In their disposition to fatten, very few cattle can rival them. They do not, indeed, attain the great weight of some breeds; but in a given time acquire more flesh and with a less consumption of food, and their flesh is beautiful in its kind. It is of that mottled, marble character so pleasing to the eye, and to the taste.

As to the value of the Devon cow for the dairy, different and somewhat conflicting opinions are entertained in England. Mr. Youatt says:

"For the dairy, the North Devon must be acknowledged to be inferior to several other breeds. The milk is good, and yields more than an average proportion of cream and butter; but it is deficient in quantity. There are those, however, and no mean judges, who deny this, and select the North Devons even for the dairy."

Perhaps one of the most valuable crosses that has yet been made, is the one described by the celebrated breeder, Mr. Bolton, in a letter to the Farmer's Magazine.

"I have known many excellent beasts bred from improved Short Horn bulls and long horn cows; indeed I never knew one of these bulls put to any cow where the produce was not superior to the dam; but the cross which I advocate, and with which I am best acquainted, is that with the *Devon* cow. I have uniformly remarked that a cross here was attended with a proportionate improvement in size, quality of flesh, and appetite to fatten. In every instance they have shown themselves superior milkers, and stand to the pail till within six or eight weeks of calving; and several instances have come under my knowledge, where they have never been dry since they first calved. So highly are they prized as milkers, that a friend of mine who hires out dairies, informs me, that dairymen give him nearly 27. per cow per year more for the half and three-fourth breeds, than they would for cows of any other breed."

Judging from the expressions of opinion given by cattle breeders in England, by the course of the agricultural periodicals of that country, and by the fact, that the late Smithfield cattle show, open to the whole Kingdom, the first prizes were taken by Devon cattle, we should imagine that since the demise of some of the most celebrated Short Horn breeders, such as Collings, Berry, and others, the Devons were treading close on the heels of the Short Horns in public estimation. The first premium was given at the late Smithfield fair, to a pure Devon, the property of Mr. Coke of Holkham, and the second to a steer only 19 months old, of improved Devon, or the Devon crossed with the Somersetshire breed. The ox weighed when dead, 1122 pounds; and the steer when dead, weighed 1332 pounds. The steer was a most remarkable one, and was owned by Mr. Giblett.

The Devonshire breed of Cattle have been more extensively introduced into the United States than any other breed of foreign cattle, and they form a large portion, in different grades, of the cattle of New England and the middle states.—Some fine stock of this breed were sent from Mr. Coke to Mr. Patterson of Baltimore, and two oxen from this importation, raised and fattened by the

Messrs. Hurlbut of Winchester, Connecticut, weighed when killed, as follows:

First Ox.	Second Ox.
Carcass 1438	Carcass 1488
Hide 117	Hide 115
Tallow 175	Tallow 213
1780 lbs.	1856 lbs.

Mr. Fisher of New York, addressed a letter to Mr. Coke giving an account of these cattle, and received the following reply from that veteran agriculturist, which we insert as showing his opinion of the Devons.

HOLKHAM, April 21, 1831.

SIR,—I am this moment favored with your kind letter, and most flattering account of the Devon oxen. It is a pleasing reflection to me, that I was the first person that introduced them into America, through my friend Mr. Patterson. I thought them at that time, and I am still more confirmed in my opinion now, that they are the most superior breed of cattle in the Island, if well selected. But I beg to be understood, when I speak of the Devonshire red cattle, it is in praise of the *North Devon cattle*, with yellow noses and indented foreheads, and yellow around their eyes, which mark their character beyond that of the South Devons, which have black noses, or intermixed with black.—These I beg to be distinctly understood not to recommend as a superior breed of cattle. Be so kind as to express my acknowledgments to Mr. Hurlbut, when you see him, and to assure him that I shall be at all times most happy to show him, or any of his American friends, should they come to England, every attention in my power, in the Agricultural line.

THO. WM. COKE.

From the New England Farmer.

Rochester, N. H., July 21, 1838

MR. BRECK—Nine or ten cows have died within a few weeks in my immediate neighborhood, and many more in other parts of the town, and thinking it possible that you or some correspondent may know the nature of the disease and the remedy for it, I will give you all the account I can of it. The disease appeared in this town two years ago, when several horses and cattle died. All the cattle on one farm died in the course of the summer and a few on the adjoining farms. Last summer it prevailed again on the same farm, and in its vicinity, and this week one cow died on the same farm. The past spring it appeared on a farm more than two miles distant from the place of its first appearance, and two oxen, one horse, and one cow, four or five years old, were lost. It also appeared in the month of June on another farm, two miles distant from either of the others, where eight or ten village cows were pastured, and five of them died within two weeks. The others have been taken from the pasture, some of them have been sick and recovered. It has also made its appearance lately in several distant parts of the town.

As nobody here is familiar with the disease of cattle, I can give you no very definite symptoms of the disease. The animals usually die within twelve hours after it is perceived they are sick. Cows suddenly fail of giving milk, are seized with trembling or violent twitchings, and soon die.

Oxen that work well all day are found dead the next morning; some live much longer. One was sick a week or more, with all the symptoms of the others, and got well. Several have been opened and all that can be discovered appears to be a disease of the *melt*. The melt is greatly enlarged and mortified, and it is supposed that the cattle are seized with a violent inflammation of the melt, which runs on to mortification, and produces death. Last year, a man who assisted in skinning a cow that died of this disease, had soon after a violent inflammation in his hand, which extended to his shoulder, producing severe suffering and considerable danger, but which finally subsided. This year similar effects have, in one instance, been produced.

If you or any of your correspondents can aid us in curing this disease, or in guarding against, you will greatly oblige me and others.

A. S. HOWARD.

[Will some of our correspondents give their attention to Mr. Howard's communication, and if the disease and remedies are known, inform us that we may give it publicity in the Farmer? By so doing an important service will be rendered.

J. B.]

MULBERRY TREES.

200,000 genuine Mulberry Trees, and as many more as may be wanted, of the most improved kinds—

Consisting of the best selected varieties now in use, for cultivation, feeding worms, and making silk;—being acclimated to this country, and adapted to either warm or cold climates, affording a rare opportunity for Companies or individuals to be supplied, from the most extensive collection of mulberry trees ever seen in any village within the United States.

Autumn is decidedly the best time for removal, and orders left with

Messrs. I. B. Colt, Sec'y of the Connecticut Silk Manufacturing Company, Hartford; Alonzo Wakeman, at the office of the American Institute, No. 187 Broadway, N.Y.; Thomas Lloyd, Jr. No. 236 Filbert street, Philadelphia, Pa.; Luther I. Cox, Baltimore, Md.; B. Snider & Co. Savannah, Ga.; Bliss Jenkins & Co. Mobile, Al.; James Lyman, St. Louis, Mo.; Case & Judd, Columbus, O.; G. Harwood, Rochester, N. Y.; and the publishers of this advertisement, or with the subscriber, in Northampton, Mass.

Orders left with the above gentlemen will be promptly attended to, and each will be furnished with samples of the foliage.

Several valuable farms may be had with or without Mulberry plantations. Apply at the office of

D. STEBBENS.

Northampton, Aug. 22, 1838.

7t au 28

IMPROVED DURHAM SHORT-HORNS.

Early in October next, Mr. Whittaker's 2d sale of pure improved Short Horns, will be held at Powelton, near Philadelphia. Due notice will be given of the day of sale, when pedigrees in detail will be furnished.

The subscriber is authorized by Col. Powel to state that all the best cattle which he has at any time imported, and the improved Short-Horns, which he considered the best in England, were either in Mr. Whittaker's possession, or had been derived from his fold. In this sale, Col Powel has not the slightest interest.

C. J. WOLBERT, Auctioneer.

aug 28

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MORUS MULTICATLIS TREES FOR SALE.

The Queen Ann's County Silk Company, near Centerville, Queen Ann's county, Eastern Shore of Maryland, have for sale from 20 to 30,000 MORUS MULTICAULIS TREES, which they will contract to deliver in Baltimore this Fall or the next Spring. Persons wishing to purchase can be supplied with any quantity not exceeding the above amount. All communications post-paid will be attended to.

P. B. HOOPER,

aug 28 3t

Pres't of Q. A. C. Silk Company.

AGRICULTURAL IMPLEMENTS AND SEED SEORE.

THE SUBSCRIBER informs the public that he keeps constantly on hand at his old establishment in Pratt-street, near Hanover, a large assortment of PLOUGHS and Agricultural IMPLEMENTS generally, which are too numerous to name in an advertisement, but invites such of the public who are in want of any articles in his line to call, assuring them that his work shall be as well made, of as good materials, and on as reasonable terms as any in the State. His patent Cylindrical Straw Cutters made on his late improved plan are kept at all times on hand, of various sizes and prices, with wood and iron frames—and he challenges its equal in any part of the world. Having an iron foundry attached to my establishment, all orders for Ploughs and Machine castings can be furnished at short notice and on reasonable terms.

In store—Herds and Orchard GRASS SEEDS, of prime quality; also, Landreth's superior GARDEN SEEDS. He is also agent for Mr. Samuel Reeves' Nursery, near Salem, New Jersey, whose fruit trees he can recommend to the public with confidence. Those wishing Trees from that Nursery this fall should hand in their orders immediately.

J. S. EASTMAN.

N. B. On hand, two Threshing Machines, with portable horse powers, that can be highly recommended and warranted equal to any in use.

TO THE PUBLIC.

Try the New Agricultural Establishment in Grant-street, next door to Dinsmore and Kyle.

Every article warranted to be first rate. The subscribers, grateful for past favors, take this early opportunity of returning their thanks to their customers and the public in general, and beg leave to inform them that they are now provided with a very extensive stock of newly manufactured AGRICULTURAL IMPLEMENTS, suitable to meet the call of Farmers, Gardeners, Merchants, Captains of vessels, and others, viz: 1000 Ploughs, assorted sizes, from \$4 to \$15 each, comprising of the old common Bar Shear, Winand's Self Sharpener; Woods & Freeborn's patent, all sizes, "Davis'," "Sinclair & Moore's" improved Hill Side Ploughs, highly esteemed for turning the furrow down hill, with wrought or cast shears; Wheat Fans, of various sizes and patterns, from \$15 to \$50 each, warranted to separate the garlic from the wheat; Corn Shellers, from \$12 to \$20; Cutting Boxes, from \$7 to \$50 each; Corn and Tobacco Cultivators, large and small; Expanding do., Wheat Cradles warranted to have fingers of the natural growth, and Grass Scythes, &c. &c.; Castings, of all descriptions and patterns, by the lb. or ton, to suit customers, allowing a liberal discount to merchants buying to sell again—all of which will be furnished on the most pleasing terms and every article warranted to be of the best quality, in proportion to the cost price. All orders by mail or otherwise shall be duly attended to with the greatest despatch.

We would particularly call the attention of Country Merchants and others; wishing to purchase agricultural implements to sell again, to the fact, that we will furnish them with articles on better terms than they can be supplied at any other establishment in the city. Our assortment is complete and as varied as that of the most extensive concern in Baltimore.

We have also connected in its operations with the above branch of business a complete assortment of FIELD AND GARDEN SEEDS, kept by Thomas Denny—Also Garden and Farm Tools, of various sorts and of the choicest collection, which will enable our customers to have filled *entire* all orders in the Agricultural and Seed Departments. mh 26 JOHN T. DURDING & Co.

CONTENTS OF THIS NUMBER.

Hint to cut corn-stalks—notice of a reaping machine—do. of the rain—do. of sale of Durham cattle—Dutton corn—Baden and Mercer do.—morus multicaulis trees—notice of the rise in the grain market—do. of Mr. Barney's cattle—do. of the corn crop in St. Mary's co. Md.—the drought and the crops in the Southern, Western and Eastern states—culture of the peach—harvesting corn—rotation of crops—Chapal on manures continued—Q. A. county silk company—Devonshire cattle—fatal disease in cattle—advertisements and prices.

Printing, executed at the Farmer & Gardener office, at short notice.

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every Monday

	PER	FROM	TO
BEANS, white field,	bushel.	1 25	—
CATTLE, or the hoof,	100lbs	7 00	8 50
CORN, yellow	bushel	1 00	1 00
White,	"	85	86
COTTON, Virginia,	pound	9	11
North Carolina,	"	9 1/2	11
Upland,	"	9 1/2	11
Louisiana — Alabama	"	11 1/2	12
FEATHERS,	pound.	45	50
FLAXSEED,	bushel.	1 12	—
FLOUR & MEAL—Best wh. wh't fam.	barrel.	—	—
Do. do. baker's	"	—	—
SuperHow. st. from stores	"	—	—
" wagon price,	"	—	—
City Mills, super	"	—	—
" extra	"	—	—
Susquehanna,	"	—	—
Rye,	"	—	—
Kiln-dried Meal, in hhds.	hhd.	—	—
do. in bbls.	bbl.	—	—
GRASS SEEDS, wholes. red Clover,	bushel.	—	—
Kentucky blue	"	2 50	3 00
Timothy (herds of the north)	"	2 25	2 50
Orchard,	"	2 00	2 50
Tall meadow Oat,	"	—	3 00
Herds, or red top,	"	90	1 00
HAY, in bulk,	ton.	12 00	16 00
HEMP, country, dew rotted,	pound.	6	7
" water rotted,	"	7	—
Hogs, on the hoof,	100lb.	—	7 25
Slaughtered,	—	—	—
HOPS—first sort,	pound.	9	—
second,	"	7	—
refuse,	"	5	—
LIME,	bushel.	32	33
MUSTARD SEED, Domestic, —; blk.	"	3 50	4 00
OATS,	"	—	—
PEAS, red eye,	bushel.	—	1 12
Black eye,	"	1 00	1 12
Lady,	"	—	—
PLASTER PARIS, in the stone, cargo,	ton.	3 87	6 00
Ground,	barrel.	1 50	—
PALMA CHRISTA BEAN,	bushel.	—	—
RAGS,	pound.	3	4
RYE,	bushel.	—	—
Susquehanna,	"	—	none
TOBACCO, crop, common,	100lbs	4 00	4 50
" brown and red,	"	4 00	6 00
" fine red,	"	5 00	8 00
" wrappery, suitable	"	—	—
for segars,	"	10 00	20 00
" yellow and red,	"	8 00	10 00
" good yellow,	"	8 00	12 00
" fine yellow,	"	12 00	16 00
Seconds, as in quality, ..	"	—	—
" ground leaf,	"	—	—
Virginia,	"	4 50	6 00
Rappahannock,	"	—	—
Kentucky,	"	5 00	8 00
WHEAT, white,	bushel.	—	—
Red, best	"	—	—
Maryland	"		

THE FARMER & GARDENER

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, E. P. ROBERTS AND SAMUEL SANDS—EDITED BY E. P. ROBERTS.

No. 22.

BALTIMORE, MD. SEPT. 25, 1838.

Vol. V.

THIS publication is the successor of the late

AMERICAN FARMER.

and is published at the office, at the N. W. corner of Baltimore and North streets, over the Patriot office, at two DOLLARS AND FIFTY CENTS per annum, if paid within one month from the time of subscribing, or \$3 if after that time. All letters to be post paid.

BALTIMORE: TUESDAY, SEPT. 25, 1838.

GRAIN AND FLOUR—The news received from Europe by arrivals since our last, has in a great measure unsettled the market, and arrested that feverish state of excitement we then spoke of, for although wheat maintains the price we then named, there is not the same spirit of speculation abroad. Sales of white wheat were made yesterday at \$2; best red 1.90; corn, yellow 98, white 96.

The rains which threatened such serious consequences to the wheat in England, had, at the last advices, subsided, and the farmers were getting in their crops in fine condition under the auspices of good weather—the crop was a fair average one in England, while in France it was above that mark.

RAIN—We had a copious rain last week, and we anticipate the happiest results from its effects to the pastures, turnips, and vegetables generally.

CORN HUSKING & SHELLING MACHINE.

We understand that Mr. Hussey, the inventor of the "Horse Power and Reaping Machine," has also invented a machine for both husking and shelling corn, and that from an experiment it has been found to answer the purpose admirably well.

DESTRUCTION BY GRASS-HOPPERS—It is admitted by every farmer with whom we have conversed, that the grass-hoppers have been far more numerous and destructive the present season than any former one within their recollection. In former years their devastations were principally confined to clover fields, turnips, cabbages and the more delicate vegetables, but since their visitation the past summer and present autumn, their appetites appear to have taken a more various range, so that nothing goes amiss with them; for with their increased numbers their appetites have lost a large portion of that fastidiousness which heretofore confined their ravages to a few plants. Among the plants upon which they have preyed, is the corn in this section of country. A few days since, in walking through a small patch on our place, we discovered that they had made free use with it. Upon one ear we discovered them at work, and as the injury was extensive, we pluck-

ed it off in order that we might hang it up in our office as a memento of their inordinate appetites. About one-third of the husk had been eaten off, and as far as the husk was off they had also eaten the kernels and were then engaged in penetrating the cob. This, as far as we know, is a novel demonstration of their destroying powers, and as they are by no means an insignificant enemy, we record the fact, with the view that the subject may elicit the attention of farmers.

We learnt a few days since from a friend, that an acquaintance residing in Carroll county, in this state, had assured him, that they had destroyed about fifty young apple trees in his orchard. What remedy is to be applied we cannot say, for so subtle an enemy is not easily trapped. We have seen it stated that ducks placed on patches of vegetables where they have been at work have been found useful in some parts of our country, and from the habits of ducks, and the shyness of the grasshopper, we should think they might be so. It is said also that fires impregnated with the smell of tar or brimstone, placed to the windward, so as that the smoke will range over the field, will protect the growing plants. If either of these remedies will answer, we think they are eminently deserving of trial.

WESTERN VIRGINIA—DURHAMS.

We promised in our 18th number to give in the succeeding one the pedigree of a Durham bull purchased by Alexander S. Matthews, Esq. of Wythe county, Virginia, but being disappointed in receiving it, we have been unable to comply with our promise until the present time. We the more readily redeem our pledge, as it always gives us sincere pleasure to be in any wise instrumental in promoting the views of a gentleman who, like Mr. Matthews, appropriates his means in an object at once so laudable and patriotic as is the improvement of stock, and because in the present instance, we are certain that, from the judiciousness of his selection, his praiseworthy undertaking will not only redound to his own individual advantage, but to the lasting benefit of such of the farmers of Western Virginia as may avail themselves of the opportunity, which will be thus offered them, of improving their respective breeds of cattle.

Nimrod, it will be perceived by the certificate of Mr. Beltzhoover, his breeder, proceeds from imported stock both on the side of sire and dam, and of a stock too, of as high bred Improved Short Horn Durhams as our father-land can boast of.

We were present on the morning preceding the departure of Nimrod for his home in the Old Dominion, when he, his sire and dam, were severally weighed at the Western Hay Scales, and we take pleasure in giving their weights, respectively, from the certificate of the weigh-master now before us. They were as follows, viz.

Doctor, sire of Nimrod, 3 years old, 1770 lbs.

Miss Tyson, dam of Nimrod, 3 do. 1300

Nimrod, 13 months old, 887

Neither of these animals were what might be called fat, and so far as Nimrod is concerned, it might be said in truth, judging from his handling, that he was capable of carrying 200 pounds more than he weighed when he was submitted to the scales, and as for his generous and warm-blooded sire, we think that, from his management in his youth, he was despoiled of at least one-third of those fair proportions he would have attained had he been in the hands of his present able keeper from the period of his calf-hood, if we may be permitted to coin that phrase for the special benefit of so fine an animal.

Pedigree of a Durham bull calf sold to Mr. Alexander S. Matthews, of Wythe Court House, named Nimrod.

Nimrod was calved on our farm near Baltimore in July, 1837, and sold in August, 1838; his sire, called Doctor, was calved on board the ship Orozimbo on her passage from Liverpool to Baltimore in the spring of 1835; he was got by the bull Orozimbo, purchased by the Hon. H. Clay of Kentucky, from R. D. Shepherd, Esq. by whom he was imported; the dam of Doctor, which was also imported by Mr. S. died at Mr. J. Ridgely's. Her pedigree I expect daily from R. D. Shepherd, Esq. who is now in Louisiana.

Miss Tyson, the dam of Nimrod, was also calved on board the Orozimbo; she was got by the bull Orozimbo; her dam, (No. 3) red & white cow, was got by Monarch, dam by a son of Favorite, grand dam by Cupid; the dam of this cow was the best milker in the herd from which she was selected; she was purchased and shipped in 1835. I can add to the above, that the dam of Miss Tyson is the best milker I have ever seen; she has had two calves since she has

been in our possession; has never been dry; and when fresh and well fed, will give from 28 to 30 quarts milk per day.

The above pedigrees are taken from those received by me from Mr. Shepherd, taken from those received by him from England.

GEO. BELTZHOVER.
MR. ROBERTS. Baltimore, Sept. 1838.

Besides *Nimrod*, whose pedigree is given above, Mr. Matthews carried with him another bull called *Hampton*, and a Durham and Holstein, grade, heifer. *Hampton* was got by *Orozimbo*, out of a full bred improved short horn Durham cow, imported by Rezin D. Shepherd, Esq. in 1835, and now in the possession of Mr. George Beltzhoover. The dam of *Hampton* is, perhaps, the most perfect model of a thorough, high bred Durham that the eyes of man ever alighted upon, and as for *Hampton*, we can truly say, without disparagement to others, that he is the beau-ideal of all that the Collings, Berrys, or Whitakers ever intended a Durham bull, pushed to the acme of improvement, should be. He is of a fashionable roan color, possessing every point which gives perfection to his race, whether intended for the dairy or the shambles, and is competent to render Western Virginia as distinguished for her fine cattle, as Eastern Virginia is now for her unrivalled race nags.

We learn that in the same county where Mr. Mathews resides there are several gentlemen who own Durhams, and among them we have heard Messrs. Cunningham and Floyd named, gentlemen who, blessed with ample means, entertaining enlightened views, and animated with that genuine spirit of enterprise, which stops not short of the attainment of its object, are, like Mr. Mathews, pushing onward in a career of usefulness as prolific of good to the country as we trust it will prove profitable to themselves; for surely those who thus toil, are eminently entitled to reap a rich reward for labors so hallowed by the blessings and the benefits they dispense to mankind.

We publish to-day a highly interesting letter from our old and valued correspondent and friend, John Smith, of Dardenne, Missouri. It will be found, as every thing else from his pen is, eminently instructive and useful. We give it with the more pleasure, as with that frankness and candor so peculiar to southern and western gentlemen, he gives us a rap over the knuckles for one of our opinions. The reader will perceive that Mr. Smith objects to our advice with respect to the quantity of wheat to be sown on the acre. The facts which he cites in support of his own views upon the subject, are strong, and would go far to corro-

borate them; but still, notwithstanding the greater experience of our correspondent, and the powerful array of facts which he has adduced, we must believe, that as a general rule, the quantities named by us under the circumstances of their application, will not be found too great. We suspect too, that in the superiority of the soil in the "magnificent valley" will be found a very cogent reason why less seed answers *there* than in the old wheat-growing regions of the Atlantic, as it is a well established fact, that wheat tillers better, and much less seed perishes in *strong* than poor ground.— But with every allowance to be made on this score we have never seen the field on which we would have put less than six pecks of wheat to the acre; for if the ground is not occupied by wheat plants, it will be by those of noxious weeds, as it is a principle of the earth not to be idle, or to have its surface exposed for any long continued period bare and exposed to the sun.

Our old friend will receive our thanks for his excellent communication, and while we obey the dictates of our heart towards him, would be permitted to express the hope that our other agricultural readers will borrow a little of that zeal which characterises him, and favor us with papers on the various subjects connected with the pursuits of husbandry, as essays from practical men are infinitely more important than all the theories in the world.

With respect to our estimate of the probable product of the corn crop throughout the U. States, we find that our correspondent also differs with us, and we think justly; for although at the time of writing the article to which he alludes, all the information then before us forced us to believe that the deficiency in the crop would be to the extent we then named, subsequent intelligence induce us to the adoption of the opinion, that it will reach at least one-half of an average crop. In many parts of the country, the product will, we are sure, turn out greatly below this estimate, but when we come to take into the account those parts where good returns have been realized, we believe it will make up the quantity we now, on better information and more mature reflection, assume, as the prospective crop. We rejoice to find that the good people of the "magnificent valley" have been blessed with abundant crops, and the more especially as our kind old friend has come in for a large share of good luck, and we sincerely trust that the same merciful Providence who has dispensed to him so bounteously from the overflows of his cornucopia, may vouchsafe to him many years of health, happiness and plenty.

[Since the above was written, we find we shall

be reluctantly compelled to divide the communication of our friend, for want of time and space.]

HUSSEY'S HORSE POWER REAPING MACHINE.

We have been furnished with the following notice and description of the operations and construction of the above machine, and give it a place for the benefit of our readers, under the belief that as harvest labor is becoming both scarce and dear, it will ere long be found alike useful and economical.

"Since the first invention in 1833, this reaping Machine has been gradually advancing in credit with farmers. It, like all other improvements, required time and experience to bring it to a state of perfection. No objection has ever been made to the quality or speed of its work; in these respects it has always given entire satisfaction; some parts have occasionally broken, and those parts have from time to time been made stronger as experience has pointed out the necessity. Some objection has been made to the inconvenience of its general construction, which was in some degree, the cause of the accidents which occurred, but last year an entire change was made in the general structure, although the grand principle of cutting remains the same; this change appears to have obviated every difficulty before complained of. The first machine, on the new arrangement, was used by Mr. Stonebraker of Hagerstown, Md., who used it through his whole harvest without the least accident.

Col. Tilghman, of the same vicinity, used one of the same kind with the same success in cutting clover seed, of which, twelve acres were cut in one day.

Machines of the same construction have been used the present year, with the same success. Of the number made for the last harvest, one was reserved by the patentee for exhibition; he commenced in Cambridge, Dorchester county, Md., where he cut about 38 acres of heavy wheat; he next cut 10 acres in Easton, Talbot county; the next was on the farm of Wm. De Coursey, Esq; where he cut 45 acres of very heavy wheat, not only to the entire satisfaction, but to the admiration of all. In cutting all this, the cutters were not sharpened, nor did the speed or the quality of the work show the least symptom of a need of sharpening. It is the opinion of those best acquainted with the machine, that it would cut not only a whole harvest, but for seven years without being sharpened at all, after being once well made, and rendered sharp; yet for the ease of the horses it would be well to grind them once a year. After cutting at Mr. DeCoursey's, the machine was carried to Philadelphia, near which it was tried in presence of a committee of the Agricultural society, whose report will soon be published; an exhibition in Lancaster co., Penn., ended its operation this year.

The following is a description of the machine as lately improved by Mr. Hussey. A frame is constructed about 5½ feet long, 3½ feet wide, and 2 feet high, resting on a pair of wheels 3 feet 3 inches diameter. A pair of shafts extend forward from the frame; the main axle is fixed to the mid-

dle parts of the frame, a plank is then placed across the frame before, and another behind the wheels and near the ground, one end of each plank is fixed to the frame on one side with hinges, the other end extends across the frame and reaches 5 feet beyond the wheel on the other side; across these extended ends, planks are fixed crosswise, forming a platform on which the grain falls when cut; on the front edge of this platform, is fixed the cutting apparatus, which is formed in the following manner: a row of iron spikes are rivetted to the platform, pointing forward, and about 6 inches long, and 3 inches apart; these spikes are formed of an upper and a lower piece, leaving a slit or mortice in each spike; all of which correspond in a straight horizontal line. The cutters are formed of blades shaped like lancet points, sharp on both edges, 3 or 4 inches long; these are rivetted side by side in a rod of iron, the whole having the appearance of a saw with long teeth. This saw is pushed endwise through the mortices in the spikes, until each blade comes to its own corresponding spikes, against which it cuts; it is then fastened to a rod, which connects with a crank inside of the frame; this crank in its revolutions gives a vibratory motion to the cutter, causing each blade to move the exact distance between two spikes; the crank receives its motions from the cog wheel on the main axle; this axle being fast in the hubs of the wheels, and rolling in boxes attached to the posts of the frame, gives motion to the crank as the machine advances ahead. The horses and wheels with the frame travel on the stubble and close to the standing grain, while the platform extends into the grain. As the machine progresses, the grain is brought between the spikes, and is cut as it comes in by the vibrating blades or cutters; the straw is held both above and below the edge of the blades, by the two parts of the spike, while the blade passes through the spike; this makes the cutting sure. While being cut, the butts receive an impulse forward, while the heads are inclined backwards; this causes the grain to fall backwards in a very regular manner on the platform; it is then pushed off with a rake behind, in very neat order for binding by a man who rides on the frame, between the wheels, and uses the rake in a manner almost precisely similar to paddling a boat. In heavy wheat, eight binders are generally required, arranged round the lot at equal distances from each other, each binding the space allotted to him; one horse is placed in the shafts and one or two ahead, as circumstances may require, with a boy on the shaft horse to drive."

The price of this Machine is \$150, the same as asked by Mr. Hussey before he made his improvements upon it, many of which are attended with considerable cost, and we understand that although the present price leaves him but a very trifling profit, it is not his purpose to raise it unless circumstances should occur, such as the increase in the value of materials and labor, to render it necessary.

As we have been often asked by letter, where Mr. Hussey could be found, we seize this occasion to say that he is now located in Baltimore,

EXPORTATION OF FLOUR TO ENGLAND,

&c.

We copy the following letter from the New York Correspondent of the National Intelligencer, in order that our agricultural friends may be kept advised in matters of deep interest to them.

NEW YORK, SEPT. 19.

THIRTY-FIVE HUNDRED barrels of flour go to Liverpool to-day in one of the packet ships, which is a new turn in the flour market. This is a speculation upon the news of the crops there, or in pursuance of orders from England. The flour market stands firm, and will till the Great Western comes in. Exchange on London has fallen back a little, in consequence of such orders for such exports—for we are sending out corn instead of cash. Our stock market, too, is at a stand-still. Monied men, till Sunday next, are lookers on in Vienna."

FROM FRANCE, we have three days' later news by a transient ship. Cotton, August 11, had advanced in Havre from 1 to 2 centimes, and, in some instances, 3 centimes. The market was very firm.

I have just learned that more flour is to be sent to England. Several purchasers are in market, and two or three, if not more, vessels are engaged.

Flour sold to-day for 9 12½ cents and 9 25. Sales have been made of corn at 106 cents. It seems to me impossible that it can sustain this price, and I think it must be caused by the foreign orders, which it is difficult to fill.

To the editor of the Farmer and Gardener.

Dardenne, P. O. Mo. Sept. 4th, 1838.

Some three or four of the last numbers of your paper that have come to hand, have furnished unequivocal evidence of the almost total failure of the corn crop in the middle and southern Atlantic States, and in an editorial article in the 17th number of your paper, you express the opinion with much seeming confidence, that throughout the whole country not more than one-fifth of an average crop will be made. This opinion may be correct as far as you had obtained specific information on the subject, but is evidently erroneous, as regards the whole; you perhaps made up that opinion upon the presumption that the drought had been equally severe and disastrous in the west as in the east, which is not the fact, but on the contrary the very reverse of that is the fact, as to the west. Throughout this whole magnificent valley, with the exception of the eastern part of Ohio, from which I have not heard, and one or two very small neighborhoods in the south of Missouri, the corn crop is not only abundant, it is good to superabundance, it is truly in keeping with this great valley; it is most magnificent—for although the summer has been most excessively hot, and we have had much less rain than usual; and although for some two or three weeks together, our corn every day looked in the heat of the day, like it must absolutely perish, yet from the excellent condition in which the ground was, and the innate strength and real stamina of our soil, the corn maintained itself, and continued to advance, though slowly, until we were blest with rain; and although we have not had much rain,

nor had it very often, we have decidedly the best crop of corn in all this region, that the country has ever produced. The crop so far as I have seen it, and I have been riding to some extent, latterly, will certainly average forty bushels to the acre, for every acre planted in the country; indeed few acres can be found any where that will not yield that quantity. I cultivate what is called a poor farm by most of my acquaintances; some of my corn land has produced 19 annual grain crops, and had no manure, not a shovel full, and of the balance a portion has produced 7 annual grain crops, and the remainder 2 without manure also; and I am confident that the poorest acre I have in corn, selected in any shape that might be chosen, will yield more than forty bushels.

The great abundance of the wheat crop reduced the price of wheat here, pretty soon after harvest, from \$1.25 to \$0.62½ at 60 days, but the failure of the corn crop at the east has produced a slight improvement in the price, and it now sells at \$0.75 cash, but this is too low in comparison with the prices at the east; you may therefore, inform all persons who may design to emigrate to the west this fall, to come ahead, we shall be able to feed a large portion of mankind this season; for in addition to the very abundant grain crops of all sorts, we have the very best mast we have had for 18 years, which is a thing not to be overlooked in a country like this, abounding in forests of oak and hickory timber.

In the last No. of the Farmer, (17) which has come to hand, you give us a treatise on sowing wheat, to some of the recommendations of which I will take the liberty of taking some exceptions. I allude to that portion of the article which treats of the quantity of seed which should be sown to the acre; the quantity you recommend is too great, decidedly too great; it is not only useless and a waste of bread-stuff to put on as much seed as you recommend, as the experience of the best farmers of this neighborhood has proven, but is absolutely injurious to production, and forbids the possibility of a first rate yield in all cases under ordinary circumstances, as I will endeavour to show. Mr. T. Howell of this neighborhood, came to the conclusion several years since, that it was useless, and worse than useless, to sow as much seed wheat on our land as was generally sown, and commenced a regular system of graduation downwards; until the last season he sowed only 2½ pecks of wheat to the acre, and he now pronounces that too much, and is this season, as I understand, sowing but 2 pecks. Mr. Howell is, notwithstanding his supposed scanty seeding, decidedly the most successful wheat raiser within my knowledge. Mr. William Clough of the vicinity of St. Charles, a highly scientific man, and a farmer on a small scale, and more with a view of testing the value of the different modes of farming, than making profit, sowed on different parts of the same piece of ground, different quantities of seed; it was a small piece of land, and consequently, did not require much time to complete the sowing process, and therefore the time of putting in could make no difference, as the whole was done in a day or two, the ground was new, thinly timbered with post-oak, black-jack and black-hickory, under growth dwarf oak, hickory and hazel, the whole of the timber was grubbed out and the ground ploughed in the early part of

the season, with the McCormick plough, about a foot deep, and at seeding time, effectually pulverized at the surface with the harrow, and on one part of the piece six pecks, and on the other three pecks of seed were sown to the acre, and the whole ploughed in with the common mouldboard plough, let into the very beam; the result has been an abundant yield, and about an equal one from each piece. On our upland prairies here, the wheat is very subject to heaving out in winter, and a few years since one of my neighbours seeded a small part of his crops very thick, $2\frac{1}{2}$ bushels to the acre, in order to satisfy himself whether that evil could be remedied by heavy seeding; I assisted that neighbour in harvesting that crop, the whole of which had suffered exceedingly from heaving out in the winter, but that part of the field which had been thickly sown was at least 50 per cent. lighter than any of the balance, and the reason of this seems perfectly obvious to me: the plants stand so thick on the ground that they are necessarily feeble, having neither sufficient room nor sufficient nutriment from the soil for a healthy development, and consequently in proportion to that deficiency, constitutional feebleness, more liable to destruction or injury than the more healthy and thrifty plants that have been well supplied with food and air. In the fall 1832, I seeded about two acres of wheat amongst standing corn, which was the first and the last that I have sown that way for many years, and for two or three lands at the commencement, not being accustomed to any impediment to a uniform spread of the seed, unintentionally sowed about two bushels to the acre; the crop stood thick, much too thick on this part of the field; the grain was good and the straw bright and beautiful, but the heads very short and averaging not more than 15 grains to the head. I found I was sowing too thick, and put on the balance of the piece five pecks to the acre, and the result was that on the thick sown part there were about double the number of straws, and on the other portion more than double the quantity of grain; the straw on the thinner sown part being large, and the heads long, and carrying generally four grains abreast, and averaging over forty grains to the head—these experiments all go to prove that heavy seeding is useless, and a majority of them show that not only useless, but absolutely injurious.

(To be continued.)

BONE MANURE.

In consequence of the extensive introduction of this new species of manure into our highly-improved system of agriculture, thousands of acres that would have been lost, are bro't under the most promising cultivation. As yet the supply has not kept pace with the demand. It will somewhat surprise our readers, that in the county of Forfar alone 150,000 bushels of bones were used last year—a quantity which, at 3s. per bushel, would cost, as nearly as may be, £23,000! This great supply came from Russia. But, for reasons not precisely known, the Russian government has issued an ukase whereby bones to be exported must, after the 1st of January next, pay a duty so high, that it is almost certain the supply from that country will be wholly cut off.—*Edinburgh Observer.*

From Chaptal's Agricultural Chymistry.

MANURES.

[The nature and action of manures explained and illustrated by M. John Anthony Chaptal, Count of Chanteleup, Peer of France, member of the Institute, &c.]

(CONCLUDED.)

I saw thirty years since, a wool merchant in Montpellier, who had placed his wash house for wool in the midst of a field, a great part of which he had transformed into a garden. In watering his vegetables he had used no other water than that of the washings; and the beauty of his productions was so great as to render his garden a place of general resort. The Genoese collect with care in the south of France, all they can find of shreds and rags of woollen fabrics, to place at the foot of their olive trees.

According to the analysis of M. Vauquelin, this animal sweat is a soapy substance, consisting of a base of potash, with an excess of oily matter, and containing, besides, some acetate of potash, a little of the carbonate and of the muriate of the same base as scented animal matter.

The dung of birds is another very valuable manure differing from that of quadrupeds in the food's being better digested, in containing more animal matter, being richer in salts, and affording some of the principles which are found in the urine of four-footed animals.

The dung of those sea-fowls, which are so numerous in the islands of the Pacific ocean, and of which the excrement furnishes an important article of commerce with S. America, as according to the accounts of M. Humboldt, they import into Peru fifty ship loads of it annually, besides a great quantity of uric acid partly saturated by ammonia and potash, some phosphate of lime, of ammonia and of potash, as well as some oily matter. Davy found the dung of a cormorant to contain some uric acid.

The good effects resulting from the use of pigeons dung in our country, has caused it to be carefully collected. One hundred parts of this, when fresh, yielded to Davy twenty-five parts soluble in water, whilst the same, after having undergone putrefaction, gave but eight; whence this able chymist concluded, with reason, that it was necessary to employ it before being fermented. This is a warm manure, and may be scattered by the hand before covering the seed, or it may be used in the spring upon strong lands, when vegetation appears languid.

The excrement of the domestic fowl approaches nearly in its qualities to that of the pigeon, without possessing the same degree of power. It contains also some uric acid, and may be applied to the same purposes as pigeon dung.

In the south of France, where they raise many silk worms, they make great use of the larvæ, after the silk has been spun from the cocoons.—They are spread at the foot of the mulberry and other trees, of which the vegetation is in a languishing condition; and this small quantity of manure reanimates them surprisingly. Upon distilling some of these larvæ, I found more ammonia than I have ever met with in any other animal matter.

Night soil forms an excellent manure; but farmers allow it to be wasted, because it is too ac-

tive to be employed in its natural state, and they know not how either to moderate its action, or to appropriate it during different stages of fermentation to the wants of various kinds of plants.

In Belgium, which has been the cradle of enlightened agriculture, and where good modes of cultivation are continued and constantly improved, they make astonishing use of this kind of manure. The first year of its decomposition, they cultivate upon the soil to which it is applied, oleaginous plants, such as hemp and flax; and the second year sow the land with corn.

They likewise mix water with the urine, and use it to water the fields in the spring, when vegetation begins to unfold. This substance is likewise dried and scattered upon fields of cabbage.

The Flemings value this kind of manure so much, that the cities set a high rate upon the privilege of disposing of the cleansings of their privies; and there are in each one of them, sworn officers for the assistance of those who wish to make purchases. These officers know the degree of fermentation suited to each kind of plant, and to the different periods in bringing this branch of industry to the same degree of perfection amongst us, that it has arrived at in Belgium, because our farmers do not realize its importance, and have a repugnance to employing this kind of manure. But could they not collect carefully all these matters, mix them with lime, plaster, or gravel, till the odor was dispelled, and then carry the whole upon the fields?

Already in most of our great cities, the contents of our privies are used for forming *poudrette*; this pulverulent product is sought for by our agriculturists, who acknowledge its good effects; let us hope, that becoming more enlightened, they will employ the fecal matter itself, as being more rich in nutritive principles, and abounding equally in salts; they can easily govern and moderate the too powerful action of this, by fermentation, or what is still better, by mixing it with plaster, earth, and other absorbents, to correct the odor.

As dung-hills are the riches of the field, a good agriculturist will neglect no means of forming them; it ought to be his first and daily care, for without dung there is no harvest. The scarcity of dung-hills, or which is the same thing, the bad state of the crops, sufficiently proves the prejudices, by which the peasant is every where governed and the horticultural blindness with which he proceeds in his labours. In our country, many of those who cultivate the land, know only the kinds of straw which are suitable for furnishing manure, and in a dung-hill of litter, consider them as acting the principal part, whereas they are only feeble accessors.

According to the experiments of Davy, the straw of barley contains only two per cent. of substance soluble in water, and having a slight resemblance to mucilage; the remainder consists entirely of fibre, which can be decomposed only after a long time, and under circumstances calculated to facilitate the operation.

I do not believe that there is in the whole vegetable kingdom, an aliment affording so little nutriment, either for plants or animals, as the dry straw of grain; serving only to fill the stomachs of the latter, and furnishing to the farmer but one hundredth part of its weight of soluble manure.

Weeds, leaves of trees, and all the succulent

plants which grow so abundantly in ditches and waste lands, under hedges, and by the road side, if cut or pulled when in flower, and slightly fermented, furnish from twenty to twenty-five times more manure than straw does. These plants, carefully collected, furnish to the agriculturist an immense resource for enriching his lands. Besides the advantage arising from the manure furnished by the plants, the agriculturist will find his account in preventing the dissemination of their seeds, which by propagation in the fields, deprive the crops of the nourishment of the soil.

The turf, that borders the fields and highways, may be made to answer the same purpose, by cutting it up with all the roots and the earth adhering to them, rotting the whole in a heap, and afterwards carrying the mass upon the fields, or what is still better, by burning it, and dressing the land with the product of the production.

If straw did not serve as beds for the animals, and did not contribute, at the same time, to their health and cleanliness, it would be better to cut the ears of corn and leave the stalks in the fields; since they serve only as absorbent of the true manures.

It is always said that barn-yard manure, besides its nutritive virtues, possesses the advantage of softening hard lands, and rendering them permeable by air and water. I do not deny the truth of this; I even acknowledge that it owes this property almost entirely to the straw which it contains; but the same effect would be produced by burying the straw upon the spot.

Besides the characteristic of providing plants with food, the various kinds of dung possess other qualities, which add to their fertilizing powers. Dung as it is applied to the ground, is never so much decomposed as to have ceased fermenting; and from the moment it is mixed with the soil it produces in it a degree of warmth favourable to vegetation, and serves to guard the young plants against the effects of the returns of the cold in the atmospheric temperature, which are so often experienced. On account of the viscous fluids which it contains, dung is not easily dried, unless it be in contact with the air. It therefore preserves the roots of the plants in a state of moisture, and supports vegetation at those periods, when, without it, plants would perish from drought. It likewise contains many salts which are transmitted by water to plants, serving to animate and excite their functions. The various kinds of dung, mixed with earth may be considered in the light of amendments to the soil, and in this view they ought to vary according to the nature of the earth to be improved. Compact soils require to be separated and warmed; they require, then, those manures which have been but slightly fermented, and that are the richest in salts. Calcareous and light earths require oily manures, which decompose slowly, and can retain water for a long time, to furnish it to the wants of plants in seasons of drought.

It is by separating these principles, that we may be able to appropriate the various kinds of manure to each species of soil and plant: the attention of agriculturists is already directed, upon this point, to the composition of mixtures of manures, called composts. These are formed by arranging one above another, beds of different kinds of manure, taking care to correct the faults of one by the pro-

perties of another, in such a manner as to produce a mixture suited to the soil to be enriched by it.

For example, if it be required to form a compost for a clayey and compact soil, the first bed must be made of plaster, gravel, or mortar rubbish; the second, of the litter and excrements of horses, or sheep; the third, of the sweepings of yards, paths, and barns, of lean marl, of the fecal matter collected upon the farms, the remains of hay, straw, &c., and this in its turn must be covered with a laying of the same materials as the first. Fermentation will take place first in the beds of dung, and the liquor flowing from these will mingle with the materials of the other layers; when the mass exhibits the signs which I have pointed out, as indicating decomposition to be sufficiently advanced, it must be carried into fields, care being first taken to mix well the substances composing the different layers.

If the compost be designed to manure a light porous and calcareous soil, it must be formed of materials of a very different character. In this case it is necessary that agrillaceous principles should prevail; the substances must be compact, the dung of the least heating kind, and the fermentation continued till the materials form a yielding and glutinous paste; the earth must be clayey, half baked, and pounded, or consisting of fat and agrillaceous marl, and mud from the sea coast. Of these all the layers must be formed.

By following these principles in my operations, I have completely changed the nature of an ungrateful soil in the neighbourhood of one of my manufactories. Over this soil composed of calcareous earth and light sand, I spread dung several years, some calcined clayey earth, and this land, upon which I could formerly raise only stone fruit, has become adapted to fruit containing kernels; and produces excellent wheat, whereas before it bore only scanty crops of oats and rye.

[From the Maine Farmer.]

PREVENTING CIDER FROM BECOMING SOUR.

There are several modes adopted by farmers, to prevent their cider from becoming sour. One is, the putting in of mustard seed—about a gill to the barrel. For some reason or other, this prevents the acetic fermentation, and the cider remains free from that sourness, or hardness, as it is sometimes called, which it otherwise would have. The different modes of refining cider, adopted by some who follow the business, depends undoubtedly on separating all unnecessary vegetable matter, from the liquor, and checking the fermentation at the right time.

Farmers generally, have neither the time nor the skill to follow out all the operations required to do this; and hence the most of their cider becomes hard, by the next summer after it is made.

We have been informed that the addition of *Saltpetre*, in the proportion of one quarter of a pound to a barrel, would not only prevent the cider from becoming hard or sour, but even if added after it had changed, would restore it to a pleasant state again.

We cannot vouch for the truth of this from any experience which we have had ourself with it, but can see no good reason why it should not succeed; nor can we discover any harm which it could do by any of the combinations which it

would make with the cider, to which it may be added.

[If a pound of good fat chalk, and 1 lb. of fresh beef be put in each barrel of cider, it will prevent fermentation, serve to feed the liquor, and keep it sweet; we have drank cider which had been thus kept well seven years.—*Ed. Far. & Gar.*]

[From the London Horticultural Journal.]

ON SMUT IN CORN, WHEAT, &c.

In the Cultivator of last year, there is a curious article on "Smut in Corn," from the pen of M. Philippar, professor of Agriculture in the Normal School of Versailles. He declares that smut is a "parasite plant, belonging to the mushroom tribe, of the genus *Uredo*." The article is neatly written, and does honor to the talents of the young professor. The opinion adopted and propagated by Mr. Philippar has been generally received as correct by the writers who have preceded him. The works of M. M. Tillet and Tessier on this subject are well known to agriculturists in France. M. Benedict Prevost, and M. de Candolle, have also written on "Smut in Corn;" and they have all asserted that it was kind of mushroom; this opinion is now controverted by M. Poiteau, who has lately written in opposition to the views of the above-named authors. He addresses himself particularly to M. Philippar; not because there was any thing to blame in that gentleman's work more than the other writers, but because, being the last who took pen in hand, he may be supposed to have illuminated the subject with the latest rays of science, and to have collected and detailed all that was known which had reference to his work.

M. Poiteau declares "Smut" to be "a local disease, contagious by touch, and not a parasite plant." His arguments are given at great length. We shall, in a concise manner, bring them before our readers; and, first, his reasons for deciding against the "mushroom" theory. When Smut was first declared to be a plant, the labors of the microscope, applied to botany, were very imperfect; matters were declared to be *uredos*, *erinees*, and *erysiphes*, which have since been discovered to be insects' nests, or tissular maladies to which the plant was subject. Hence it followed, that as microscopic botany became better known, these pretended plants gradually disappeared from the following editions of botanical works. Now these plants have been generally classed in the category as the Smut, and as these have been proved not to be of the mushroom race, so may Smut also. The opinion of some living agriculturists are cited by M. Poiteau, who consider Smut to be "an irritating humor, placed in the plant by the puncture of an insect, invisible on account of its smallness;" but he gives no proof that this can be the case, he only asserts that such is the opinion of men worthy of being listened to, from their experience and habits of observation. He brings forward the fact mentioned by Bose, who says, "a most remarkable thing is, that if the thick oil, which is taken from Smut by distilling it, by holding it over a hot fire, is placed in contact with sound corn, nearly a third of the ear will be affected with Smut." M. Poiteau maintains, that this is altogether inexplicable, unless Smut be contagious by touch; but even allowing this, it is no proof that the former opin-

ions may not still be well founded. M. Poiteau says, that every experiment tried by M. Philppar proves as much for the opinion that Smut is a disease, as that it is a parasite plant; but admitting this, M. Poiteau does not *prove* what he desires, namely, that his theory is correct. He also attacks M. Philppar's declaration, that Smut is propagated by seed; but we cannot find that he gives *proofs* that such is not the case. M. Poiteau very fairly cites against himself the *Memoire* of M. Bene. Prevost, at the Institute in 1806—in that paper he distinctly states, that he saw the Smut change its appearance and germinate. M. Poiteau asks, if that can be called germination which is nothing more than a change of form from round to oblong. "If," he goes on to say, "all changes which are seen in plants are taken for germination, every vegetable thing in nature should be deemed susceptible of germination." M. Poiteau gives M. Philppar great praise for his zeal and ability; but not the less insists that he is in error. We do not profess to give any opinion on the nature of Smut; we merely are anxious to lay before our readers the facts of the controversy. We must, however, declare, that we think M. Poiteau altogether fails to prove his position, that "Smut is a malady contagious by touch." He asserts boldly, and finds fault unhesitatingly; but he does not *give proofs*.—We should much have preferred to see some hints given which might tend to remedy the evil. Smut does confessedly exist; and to be able to guard against its ravages would be a great blessing to the husbandman, but to enter into discussion as to the origin of the evil, without considering what are the best means of removing it, seems to us but of little practical utility. Any inquiry into the cause of Smut, or into its nature, can be profitable only inasmuch as we may, in our researches, discover the means of guarding against the devastation with which agriculture is so often cursed from it. If our neighbors, on the other side of the channel, would give us some hints bearing on this point, we should be more indebted to them than for their discussions on the origin of Smut. We conceive, however, that some good may arise from making known in this country what takes place respecting agricultural subjects in France; and for that reason have we referred to the above controversy. Perhaps some of the experienced agriculturists of this country may be excited by it to give their view of the matter to the public. Should they do so, our article will not have been written in vain.

ADVANTAGES OF SCIENCE.

The British Farmers' Magazine abounds in communications urging the establishment of the national agricultural institution. Scotland is particularly referred to as affording a striking illustration of the utility of such associations. Forty years ago, says one of these writers, Scotch husbandry was far inferior to that of England; but now, he says, it is manifestly superior. This is ascribed mainly to the influence of the Highland Agricultural Society, to the interest which the nobility and gentlemen of wealth have taken in diffusing agricultural science, and promoting agricultural improvement, and the establishment of museums for the exhibition of agricultural products, and models of agricultural implements.

Among these writers is a Mr. Handley, who has addressed a very able letter to Earl Spencer, who

seems to be regarded as the pioneer in this praiseworthy project. The following extracts from this letter will not fail to interest the reader.

"Science—by which is to be understood, that knowledge which is founded upon the principles of nature, illustrated by demonstration—is the pilot that must steer us into those hitherto unexplored regions, where I am well convinced a mine of wealth is still in store for British agriculture. Chemistry, botany, entomology, mechanics, require but to be invited, to yield a harvest of valuable information to guide and to warn us.

"What has been the course adopted by our enterprising manufacturers? Had they been satisfied with the inventions which chance or the intelligence of their artizans might have discovered, in vain would they have struggled for the proud ascendancy which they now hold in the scale of the manufacturing world. How truly has it been said, that a Manchester manufacturer, who had been absent from England for the last seven years, would be ruined, if, on his return now, he endeavored with his former processes, to compete with the almost daily improvements of his indefatigable and intelligent rivals. How many thousands and acres of land would the bleaching operations of Manchester alone require—what enormous capital would lie stretched for weeks unproductive on the sward—and how impossible would it have been to have completed the accumulated orders from foreign customers, had not chemistry furnished a cheap and rapid substitute?" * * *

The writer then adverts to the still disputed and unsettled question, whether it is better to apply manure in a fermented or unfermented state? What are the principles upon which lime proves beneficial to lands? That nothing has been definitely settled upon the latter point, is evidenced by the fact, that "vast sums of money have been, not only uselessly expended, but much labor has been thrown away, in anticipation of beneficial results from the use of lime, which had the subject been better understood, might have been saved, but positive injury has resulted, which in thousands of acres has proved irredeemable." The same uncertainty is then pointed out in regard to the operation of gypsum, of salt; and also in many other interesting and important branches of agriculture, which can only be settled by chemical and philosophical research.

"Botany"—continues Mr. H.—"by which I would be understood to mean, not that branch of the science which is confined to nomenclature and classifications, but which treats of the structure, the economy, the properties, uses, and diseases of plants, a correct knowledge of which tends to increase their number, and improve their quality, offers to the farm not less valuable truths than it imparts to the garden. The important labors of Mr. Knight, for instance, uniting as he does the ablest practice with the most profound science, and who has successfully cultivated the principles of the philosophy of vegetation, and thus improved the practice of horticulture, are alone sufficient to stimulate the agriculturist to extend his inquiries into the same field of interesting and useful discovery.

"The disease of plants, whether arising from a superabundance or deficiency of juice, from its impure qualities, or from external causes, though at various times treated of by practical and scien-

tific writers, are as yet very imperfectly understood.

"*Mildew, rust, smut*, and a variety of diseases familiar to every farmer, continue prevalent, and baffle all attempts to guard successfully against them, notwithstanding the numerous nostrums quoted as infallible.

"How they are originated or propagated is still matter of doubt; yet this knowledge is essential to the cure. The preparation and choice of seed, the manures applied, their nature and quantity, and the culture of the soil, are probably all, more or less, intimately connected with their existence, and, if carefully and scientifically considered, might furnish the remedy.

"The rotation of crops and their comparative tendency to exhaust the soil on which they grow; their effects upon each other, in either furnishing or extracting the nutriment requisite for their successor, the theory of their excrementitious operation; the facilities they respectively afford to the propagation or destruction of noxious weeds, the still more important investigation as to the value of different plants and grasses as food: the most advantageous methods of cultivating them, their power to withstand seasons; the disposition of seed grown in southern latitudes to retain its propensity to early vegetation and maturity, though sown in the north; the benefits derivable from change of seed under all circumstances, the rules for selecting and improving new varieties, a subject so ably treated by Col. Le Coutier; and the habits, modes of growth, and peculiarities of weeds, which affect agriculture, and the most effective means of extirpating them; with many other similar subjects which it is unnecessary to enumerate, come within the legitimate range of the botanist's inquiries, and would render his co-operation invaluable to the agriculturist.

"*Entomology*, and that branch of *Zoology* which appertains to worms, furnishes another subject for scientific research, most interesting and important to agriculture.

"Lastly, I would refer to the benefits which would accrue to agriculture, were the *mechanism* of our implements more scientifically attended to. Mechanical men, possessed of talent competent to the production of the highest class of machinery, cannot be expected to draw upon their invention, unless, as in manufactures, they are stimulated to exertion by the assurance, that success in the improvement of old, or the invention of new machines, would ensure their reward, from premiums or general demand. Were such the case, it may be safely predicted, that the construction of even our simplest implements, which in fact constitute the mechanism of agriculture, would not be left to the contrivance of village smiths, but would command the attention of men whose intelligence would lead them to calculate the nature and amount of the various and frequently conflicting forces to be overcome, and whose mechanical skill would give to every implement its most effective shape.—*Cultivator*.

PEACH TREES.

The valuable fruit tree has for a considerable number of years past fallen a sacrifice to a destructive insect that preys upon it near the root, which is discoverable by a gummy substance issuing from the trunk.—Many receipts have been

published to prevent and destroy this ruinous insect; but they have not had the beneficial effect, that could be desired. The writer of this has a favorite tree in his yard, which has for some years been infested with these insects, and which he has taken great pains to remove by the application of ashes, lime, tar, &c., all of which have failed to answer the intended purpose. In the course of this late spring, when the leaves came they soon changed to a pale color, and to all appearance the tree was going to die. As the last resort for its restoration he had recourse to charcoal, and a small box was placed around the roots of the tree and filled with that article. It so far succeeded that in a short time the tree revived and took a second growth, and now is in a luxuriant state, the leaves of a dark green color, equal almost to any thing, and much supposes all who had previously seen it.—*Baltimore American*.

CURE FOR THE DROPSY.

The following article came to our hand from a most respectable source, and we strongly recommend it to the attention of our readers.

Extract from a letter written by a very intelligent and respectable man, dated in Maine, April 5, 1838.

"I am knowing to two extremely distressing cases of dropsy being suddenly relieved by the means of the bark of Elder. One a woman advanced in years, in the last stage of the disease, who lost a brother a short time previous, by the same disease. The other a young woman, who was confined to her bed for nearly twelve months, (four of which previous to January last she was unable to lie down,) and whose strength was almost exhausted, is wholly free from dropsy and recovering strength in a manner surprising and unexpected. Other cases less aggravating have been cured by the same. The recipe is—"Take two handfulls of the green common Elder, steep it in two quarts of white Lisbon wine twenty-four hours, take a gill of the wine in the morning, fasting, or more if it can be borne; or if more convenient, in the morning or part about noon, on an empty stomach. The effect of the bark prepared as above, or pressed juice from the leaves (full grown) which had been used with success when wine could not be procured, is that it promotes all the animal secretion necessary to health, which is the cause of its salutary effect in dropsy. Great debility will always follow the use of powerful evacuants, and not esteemed unsafe. Yet caution is recommended in using the buds, as their effect is esteemed and has been found dangerous in some cases.

THE BADEN CORN.

The above species of Corn, was introduced into this County by the Hon. J. H. MARTIN, and very happily illustrates the maturity and perfection to which the branch of Farming may be brought by care, attention and industry. And we may well draw a useful and salutary lesson from this experiment, and apply it to the raising of Hogs, Cows, Horses, or any and every kind of domestic animals, as well as all sorts of grain.

If we have been correctly informed, a gentleman in the neighborhood of Bladensburg began some 22

years since, to select from his field of standing Corn, those stalks that were best grown, and had the largest number of full grown ears upon them; these he laid carefully aside for seed corn, the ensuing year. And then the best stalks and largest number and fullest ears, were year after year carefully subjected to like process till the present time. The stalk now yields from 6 to 15 ears, two stalks being generally left in a hill.—*Athens (Al.) Repub.*

THE CROPS—A correspondent of the N. Y. Express has conversed with "a gentleman who has just returned from a journey through Connecticut, Massachusetts, New Hampshire and Maine. This gentleman says, on enquiry among the farmers in each of the above named states, they say they shall gather a larger crop of corn in each state than they have done in fifteen years. The potato crop in Maine and New Hampshire will be at least two-thirds of a good crop. The rye, wheat and oat crop is at least a fair crop; the crop of corn in Connecticut is greater than for three years past. The potato crop will be small—the rye and grass crops good."

MULBERRY TREES.

200,000 genuine Mulberry Trees, and as many more as may be wanted, of the most improved kinds—

Consisting of the best selected varieties now in use, for cultivation, feeding worms, and making silk;—being acclimated to this country, and adapted to either warm or cold climates, affording a rare opportunity for Companies or individuals to be supplied, from the most extensive collection of mulberry trees ever seen in any village within the United States.

Autumn is decidedly the best time for removal, and orders left with

Messrs. I. B. Colt, Sec'y of the Connecticut Silk Manufacturing Company, Hartford; Alonzo Wakeman, at the office of the American Institute, No. 187 Broadway, N. Y.; Thomas Lloyd, Jr. No. 236 Filbert street, Philadelphia, Pa.; Luther I. Cox, Baltimore, Md.; B. Snider & Co. Savannah, Ga.; Bliss Jenkins & Co. Mobile, Al.; James Lyman, St. Louis, Mo.; Case & Judd, Columbus, O.; G. Harwood, Rochester, N. Y.; and the publishers of this advertisement, or with the subscriber, in Northampton, Mass.

Orders left with the above gentlemen will be promptly attended to, and each will be furnished with samples of the foliage.

Several valuable farms may be had with or without Mulberry plantations. Apply at the office of

D. STEBBINS.

Northampton, Aug. 22, 1838.

7t au 23

IMPROVED DURHAM SHORT-HORNS.

Early in October next, Mr. Whittaker's 2d sale of pure improved Short Horns, will be held at Powelton, near Philadelphia. Due notice will be given of the day of sale, when pedigrees in detail will be furnished.

The subscriber is authorized by Col. Powel to state that all the best cattle which he has at any time imported, and the improved Short-Horns, which he considered the best in England, were either in Mr. Whittaker's possession, or had been derived from his fold. In this sale, Col. Powel has not the slightest interest.

C. J. WOLBERT, Auctioneer.

aug 23

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MORUS MULTICATLIS TREES FOR SALE.

The Queen Ann's County Silk Company, near Centerville, Queen Ann's county, Eastern Shore of Maryland, have for sale from 20 to 30,000 MORUS MULTICATLIS TREES, which they will contract to deliver in Baltimore this Fall or the next Spring. Persons wishing to purchase can be supplied with any quantity not exceeding the above amount. All communications post-paid will be attended to.

aug 23 3t

P. B. HOOPER, Pres't of Q. A. C. Silk Company.

AGRICULTURAL IMPLEMENTS AND SEED STORE.

THE SUBSCRIBER informs the public that he keeps constantly on hand at his old establishment in Pratt-street, near Hanover, a large assortment of PLOUGHS and Agricultural IMPLEMENTS generally, which are too numerous to name in an advertisement, but invites such of the public who are in want of any articles in his line to call, assuring them that his work shall be as well made, of as good materials, and on as reasonable terms as any in the State. His patent Cylindrical Straw Cutters made on his late improved plan are kept at all times on hand, of various sizes and prices, with wood and iron frames—and he challenges its equal in any part of the world. Having an iron foundry attached to my establishment, all orders for Ploughs and Machine castings can be furnished at short notice and on reasonable terms.

In store—Herds and Orchard GRASS SEEDS, of prime quality; also, Landreth's superior GARDEN SEEDS. He is also agent for Mr. Samuel Reeves' Nursery, near Salem, New Jersey, whose fruit trees he can recommend to the public with confidence. Those wishing Trees from that Nursery this fall should hand in their orders immediately.

J. S. EASTMAN.

N. B. On hand, two Threshing Machines, with portable horse powers, that can be highly recommended and warranted equal to any in use.

FOR SALE,

A short horn bull, YOUNG REGENT, sired by Dr. Hosack's bull Malcolm, and his dam is believed to be a full blood Durham short-horn. Young Regent is handsomely marked with white and brown spots, of fine form and size, about 3 years old last spring; his calves are fine, as may be seen on this farm. He will be sold a great bargain, if an early application is made to

ROBT. SINCLAIR,

se 11 3t Clairmont Nursery, near Baltimore.

NEW SEED STORE.

The subscriber has just received a FRESH SUPPLY OF GRASS SEEDS, warranted to be genuine and fresh, suitable to the approaching season, such as

Timothy

Orchard

Herds or Red Top

Also, BUCKWHEAT for fall seeding, as an inlay, preparatory to the wheat crop.

TURNIP SEEDS, of different kinds and of the best quality. Farmers and Gardeners will find it to their advantage to call and supply themselves liberally of this seed, to supersede in some measure their loss occasioned by the drought. Also BIRD SEED of every kind.

All orders by mail or otherwise, for CASH or good REFERENCES, will be faithfully and duly executed, with despatch. FARM AND GARDEN TOOLS of all kinds on best terms, furnished by

THOMAS DENNY,

au 21 4t

Grant street, near Pratt street.

SPLENDID BLOODED STOCK FOR SALE.

The proprietor of Covington farm will dispose of the following fine bulls on reasonable terms, v. z.

One bull two and a half years old.

One do. six months old.

of the improved Durham short horn breed; the dam of the first was got by the celebrated bull Bolivar; for size, form and beauty they are not surpassed by any animal in the state.

Three Devon Bulls, one of which is seven years old next spring, and the largest Devon in the State. The Devons are from the stock of the late Wm. Patterson, and of undoubted purity.

Two half Devon bulls.

Two bulls half improved Durham short horn, and half Devon.

One splendid bull, a cross of the Bakewell, Alderney and Devon.

One bull, half Alderney and half Holstein.

These fine animals may be seen at Covington farm, near Petersville, Frederick county, Md. on application to James L. Hawkins, Baltimore, or to

se 11 f

FREDERICK EBERT, Manager.

A DURHAM BULL.

For sale, a superior Bull—he is of fine size and unexceptionable pedigree, which will be given next week—he comes from a strain of deep milkers, and is himself the sire of several fine animals. Price \$500.

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BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every Monday

	PER	FROM	TO
BEANS, white field,.....	bushel.	1 25	
CATTLE, or the hoof,	100lbs	6 50	8 00
CORN, yellow	bushel	98	
White	"	96	
COTTON, Virginia,.....	pound	9	11
North Carolina,.....	"	9 1/2	11
Upland,.....	"	9 1/2	11
Louisiana — Alabama	"	11 1/2	12
FEATHERS,.....	pound.	45	50
FLAXSEED,.....	bushel.	1 12	
FLOUR&MEAL—Best wh. wh'tfam.	barrel.		
Do. do. baker's.....	"		
SuperHow. st. from stores	"		
" wagon price,.....	"		
City Mills, super.....	"		
" extra.....	"		
Susquehanna,.....	"		
Rye,.....	"		
Kiln-dried Meal, in hhds.	hhd.		
do. in bbls.	bbl.		
GRASS SEEDS, wholes. red Clover,	bushel.		
Kentucky blue	"	2 50	3 00
Timothy (herds of the north)	"	2 25	2 50
Orchard,.....	"	2 00	2 50
Tall meadow Oat,.....	"		3 00
Herds, or red top,.....	"	90	1 00
HAY, in bulk,.....	ton.	12 00	16 00
HEMP, country, dew rotted,.....	pound.	6	7
" water rotted,.....	"	7	
Hogs, on the hoof,.....	100lb.	7 00	7 50
Slaughtered,.....	"		
HOPS—first sort,.....	pound.	9	
second,.....	"	7	
refuse,.....	"	5	
LIME,.....	bushel.	32	33
MUSTARD SEED, Domestic, —; blk.	"	3 50	4 00
OATS,.....	"		
PEAS, red eye,.....	bushel.		1 12
Black eye,.....	"	1 00	1 12
Lady,.....	"		
PLASTER PARIS, in the stone, cargo,	ton.	3 87	6 00
Ground,.....	barrel.	1 50	
PALMA CHRISTA BEAN,.....	bushel.		
RAGS,.....	pound.	3	4
RYE,.....	bushel.		
Susquehanna,.....	"		none
TOBACCO, crop, common,.....	100lbs	4 00	4 50
" brown and red,.....	"	4 00	6 00
" fine red,.....	"	8 00	10 00
" wrappery, suitable	"		
for segars,.....	"	10 00	20 00
" yellow and red,.....	"	8 00	10 00
" good yellow,.....	"	8 00	12 00
" fine yellow,.....	"	12 00	16 00
Seconds, as in quality,	"		
" ground leaf,	"		
Virginia,.....	"	4 50	6 00
Rappahannock,.....	"		
Kentucky,.....	"	5 00	8 00
WHEAT, white,.....	bushel.	2 00	
Red, best	"	1 90	
Maryland	"	1 80	1 85
WHISKEY, 1st pf. in bbls.....	gallon.	45	46
" in hhds.....	"	46	
" wagon price,.....	bbls		
WAGON FREIGHTS, to Pittsburgh,	100 lbs	2 25	
To Wheeling,.....	"	2 50	
WOOL, Prime & Saxon Fleeces,	pound.	50 to 55	
Full Merino,.....	"	45 50	
Three fourths Merino,.....	"	40 45	
One half do.....	"	35 40	
Common & one fourth Meri.	"	35 40	
Pulled,.....	"	30 33	

DURHAM & DEVON BULL.

Forsale, a young bull, 18 months old. He was got by a full bred Durham bull of the strain of Col. Powell, out of a full bred Devon cow. His color is a strawberry roan shewing his affinity to the blood of his sire. His pedigree will be warranted, and his price is \$75, cash on delivery.

EDWARD P. ROBERTS,
Editor Farmer & Gardener.

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BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,.....	barrel.		
BACON, hams, new, Balt. cured.....	pound.	15	16
Shoulders,..... do.....	"	13	14
Middlings,..... do.....	"	13	14
Assorted, country,.....	"	14	
BUTTER, printed, in lbs. & half lbs.	"	31	
Roll,.....	"		37 1/2
CIDER,.....	barrel.		
CALVES, three to six weeks old.....	each.	5 00	6 00
Cows, new milch,.....	"	25 00	40 00
Dry,.....	"	12 00	15 00
CORN MEAL, for family use,.....	100lbs.	1 75	
CHOP RYE,.....	"	1 75	2 00
EGGS,.....	dozen.	12 1/2	
FISH, Shad, No. 1, Susquehanna,	barrel.	9 75	10 00
No. 2,.....	"	9 50	
Herrings, salted, No. 1,.....	"	4 50	4 62
Mackerel, No. 1, ——— No. 2	"		
No. 3,.....	"		
Cod, salted,.....	cwt.	3 25	3 37
LARD,.....	pound.		11

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

U. S. Bank,.....par	VIRGINIA.
Branch at Baltimore,.....do	Farmers Bank of Virgi. par
Other Branches,.....do	Bank of Virginia,.....do
MARYLAND.	Branch at Fredericksburg, do
Banks in Baltimore,.....par	Petersburg,.....do
Hagerstown,.....do	Norfolk,.....do
Frederick,.....do	Winchester,.....do
Westminster,.....do	Lynchburg,.....do
Farmers' Bank of Mary'd, do	Danville,.....do
Do. payable at Easton,.....do	Branch of Valley, Winch. par
Salisbury,.....1 per ct. dis.	Bank at Romney, ... par
Cumberland,.....par	Do. Charlestown, par
Millington,.....do	Do. Leesburg, ... par
DISTRICT.	Wheeling Banks, ... 2 1/2
Washington, } Banks, 1 p. c.	Ohio Banks, generally 3
Georgetown, } Banks, 1 p. c.	New Jersey Banks gen. 3
Alexandria, }	New York City, ... par
PENNSYLVANIA.	New York State, ... do 1/2
Philadelphia,.....par	Massachusetts, ... 1 1/2
Chambersburg,.....1/2	Connecticut, ... 1 1/2
Gettysburg,.....do	New Hampshire, ... 1 1/2
Pittsburg,.....2 1/2	Maine, ... 1 1/2
York,.....1/2	Rhode Island, ... 1 1/2
Other Pennsylvania Bks. 2	North Carolina, ... 3 1/2
Delaware [under \$5].... 4	South Carolina, ... 4 1/2
Do. [over 5]..... 1 1/2	Georgia, ... 5 1/2
Michigan Banks,.....10	New Orleans,..... 7 1/2
Canadian do.....10	

FARMERS' REPOSITORY
OF AGRICULTURAL IMPLEMENTS AND EASTMAN'S CYLINDRICAL STRAW CUTTERS
IMPROVED.

THE Subscriber informs the public that he has secured by letters patent his late and very important improvements on his Cylindrical Straw Cutter, by which improvements they are made more durable and easier kept in order. All the machinery being secured to an iron frame the shrinkage, wear and decay of wood is avoided. The feeding part of his improved machine is upon an entire different principle from the former machine; far more durable, requiring neither skill or care to keep it in order. These machines are so constructed as to make the freight on them less than half what it cost to ship the former or wood machines, an important desideratum to purchasers living at a distance; and I now offer it to the public upon the credit of my establishment as the most perfect machine in existence for the same purpose. They are also adapted to cutting rags for paper making, and for cutting tobacco as manufactured by Tobacconists, &c.

I also keep these machines on hand made as heretofore with my new feeding machinery attached to them; and also a general assortment of Agricultural Implements, as, usual. Elliott's Horizontal Wheat Fans, and Fox & Bolland's Threshing Machines are both superior articles.

My stock of Ploughs on hand are not equalled in this city either for quality, quantity, or variety. I have a large assortment of Plough Castings at retail or by the

ton, and having an Iron Foundry attached to my establishment can furnish any kind of Plough or Machine Castings on reasonable terms and at a short notice.

All repairs done with punctuality and neatness. On hand, a few Patent Lime Spreaders, Horse Powers, &c. &c.

Also just received, a fresh supply of Landreth's superior Garden Seeds. In store, superior Timothy and Orchard Grass Seed and Seed Oats. All implements in the agricultural line will be furnished by the subscriber, as good and on as reasonable terms as can be had in this city, with a liberal deduction to wholesale purchasers. Likewise will receive orders for Fruit Trees from Mr. S. Reeves' Nursery, New Jersey.

JONATHAN S. EASTMAN,

Pratt street, Baltimore,

Feb 20

Between Charles & Hanover sts

ROBERT SINCLAIR, Jr. & CO.

MANUFACTURERS & SEEDSMEN,

Light street, near Pratt street wharf, offer for sale,

An extensive assortment of Agricultural and horticultural Implements and Seeds, comprising all that are required to stock the most extensive plantation. Particular attention is directed towards the various departments, where the most competent workmen are employed, and durable materials used.

The assortment of Ploughs is large and various, among which are the Double mould board, Sub-soil, Self-Sharpening, Improved Davis, &c. &c.

Wheat Fans—Com. Dutch, Crank Shake and Watkins' Patent.

Corn Shellers—for manual and horse power, warranted to shell 2a700 bushels of Corn per day.

Corn and Cob Crushers—for breaking the cob in suitable size for feeding stock. Stock raisers will find their interest promoted by using this machine by a saving of full 30 per cent.

Cylindrical Straw Cutters—Of these there are several sizes. The late improvements made have rendered them the most perfect and effective straw cutter in this country. Cultivators, for cultivating corn, tobacco, &c.

Drill and Sowing Machines, for drilling vegetable and grass seeds.

Vegetable Cutters, for slicing Turnips, mangel wortzle, pumpkins, &c.

Harrows—Expanding, com. square and diamond shape. Common Dutch Straw Cutters.

Patent Seeding Plough, made with 2 or 3 mould boards, which are formed as practice and science dictates to be the most perfect mode. The mould and landboard of these ploughs present two edges or sides, which can be reversed when the first course wears out.

Garden Seeds of every variety.

Field Seeds—English and Italian Ray Grass, Trefoil, Burnet, St. Foin, Lucerne, white and red Clover; green and blue Grass; early Potatoes; Gama Grass Roots; Baden and Mercer Corn; Dutton and early white Flint; several sorts garden corn; Italian and Tuscan Spring wheat; Timothy, herds and orchard Grass; Millet, &c.

Trees and Plants supplied at the shortest notice, from the Clairmont Nurseries near this city.

Wanted, prime lots Seed Grain and Grass Seeds.

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A THRESHING MACHINE FOR SALE.

An endless Chain Threshing Machine, which was over 4 years in use, will be sold for \$100. The machine is in good order, is approved of by its present owner, and only sold because it is too small for his crop of wheat. It is competent to get out from 40 to 60 bushels of wheat a day, and would suit a small farm admirably well, as it does clean work, and is easily kept in repair.

Applications by letter, post paid, to be made to

EDWD. P. ROBERTS, Baltimore, Md.

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CONTENTS OF THIS NUMBER.

Notice of the foreign grain market—do. of the rain—do. of a new corn husking and shelling machine—destruction by grasshoppers—Durhams for Virginia—pedigree of Nimrod—notice of a letter from Mr. Smith of Dardenne, Mo.—description of Hussey's reaping machine—exportation of Flour to England—letter from Dardenne, Mo.—bone manure—Chapal on manures, concluded—preserving cider—smut in corn, wheat, &c.—advantages of science—charcoal a curative for the peach tree—cure for the dropsey—the Baden corn—the corn crop in the east—advertisements—prices current.

THE FARMER & GARDENER

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, E. P. ROBERTS AND SAMUEL SANDS—EDITED BY E. P. ROBERTS.

No. 23.

BALTIMORE, MD. OCT. 2, 1838.

Vol. V.

THIS publication is the *successor* of the late
AMERICAN FARMER.

and is published at the office, at the N. W. corner of
Baltimore and North streets, over the Patriot office, at two
DOLLARS AND FIFTY CENTS per annum, if paid within one
month from the time of subscribing, or \$3 if after that
time. All letters to be post paid.

BALTIMORE: TUESDAY, OCT. 2, 1838.

We conclude to-day the very interesting letter
of our valued correspondent, John Smith, of Dar-
denne, Missouri, and bespeak for it the attentive
perusal of our patrons.

TOBACCO—The Tobacco crop of the present
season, as far as we can learn, will be short in
quantity and inferior in quality, and if such should
be the case, unless the stock on hand in this coun-
try and Europe should be unusually great, we
should think it would be the part of prudence in
the holders of the article not to be in a hurry to
force their respective stocks into the market, as
from the causes we have stated above, a greatly
appreciated value must be imparted to the better
sorts.

A LARGE YIELD OF WHEAT—Having heard
some days since that a neighbor of our's had
grown a very large quantity of wheat upon a lot
of his, we paid him a visit, and was pointed out the
piece of ground, which we measured, and found
it to contain 180 perches, equal to 1 acre 20 per-
ches, being 10 perches wide and 18 perches long.
The quantity of wheat raised on it, *this* season,
was 51 bushels. Last year the same piece of
ground was in wheat, and there was grown there-
on 43 bushels and 1 peck. The product of last
year, to the acre, was 38 bushels, 3 pecks, 3 gal-
lons and 2 gills; that of the present year is 45½
bushels. These products, it will be perceived,
have been realized two years successively on the
same ground, with the same grain, and show an
increase upon that of the first year of 7 bushels
and 3 pecks; thus proving that, though as a gene-
ral rule it is wrong to repeat the same crop two
years in succession, yet under a favorable concur-
rence of circumstances, it may advantageously be
done. The manure used both years was *night-*
soil, not stintingly, but generously applied. The

variety of wheat grown both years was the smooth
white.

STIMULATING MANURES.—We copy into our
journal to-day, an instructive article upon this sub-
ject, and feel that we need not commend it to the
notice of our agricultural friends, as its importance
will challenge and secure for it the attention of
every intelligent reader. It is from the pen of
Count *Chaptal*, a man endeared to the friends of
husbandry by his profound and enlightened attain-
ments in agricultural chymistry—by his ardent
zeal in the cause of the soil—and last though not
least, by his long experience as a successful prac-
tical farmer.

CATTLE'S HEALTH.—If you wish to preserve
your cattle's health, always keep a mixture of *tar*
and *salt* in equal proportions in a trough where
they can have constant access to it. This should be
renewed once a week in winter and twice a week
in summer.

SMITH'S LIME-SPREADER.

We have before noticed the invention of a ma-
chine for spreading lime by our ingenious fellow-
citizen, *Francis H. Smith, Esq.*, and revert to it
again in consequence of the repeated applications
that have, of late, been made to us for information
as to its efficiency and cost. To speak then first
of its efficiency. There is no doubt in our mind,
and we believe there is none in the mind of any
person who has seen it in operation, but that it is
a most useful machine,—one that is eminently
calculated to promote the object for which it is in-
tended, and that it not only economises time, but
does the work better than it can possibly be done
by hand.

One of the most desirable things aimed at in
liming, is the *equal distribution* of the mineral o-
ver every part of the field, and this, it must be
admitted by all candid persons, cannot be effect-
ed by shovel-spreading, as with all the care and
precaution that may be taken, inequality will en-
sue in despite of the best directed efforts.

Again, it is almost impossible, by such spread-
ing, to *regulate the quantity* sown on the acre, and
hence disappointments often occur to the mortifi-
cation and cost of farmers.

The injurious effects, too, of the old method of
spreading, upon the lungs and eyes of those en-
gaged in such work, have always been subjects of
regret, if they have not restricted the use of this
generous agent in the fertilization of the soil.

We are happy to say, that one and all of these
objections have been completely obviated by Mr.
Smith's machine, and that by it the following re-
sults are produced.

1. Owing to the beautiful and nice mathematic-
al arrangement of the several parts of this machine,
it is perfectly practicable to distribute any given
quantity of lime evenly and equally over every
part of the field; such is the equality of the ope-
ration that the ground after the work is done is
covered with as much nicety as if the distribution
had been effected by patient laborers from hand-
sieves.

2. By the substitution of different cog-wheels,
the machine may be so regulated as to spread 50,
75, 100, or 150 bushels of lime upon the acre,
as may best suit the views of the farmer; and any
of these quantities may be distributed with the
greatest nicety and exactitude.

3. From the peculiar construction of the ma-
chinery, no disagreeable effects result to the work-
man while engaged in their labor, as but little
dust arises, and that which does, is left behind by
the cart, so that the laborers are not at all incom-
moded thereby.

The above advantages we have pointed out,
will, we are sure, be considered as important *de-*
siderata by all intelligent farmers; but independ-
ent of these, there is another of great moment—
We allude to the superior despatch with which
the work can be done. Two hands with a cart
and horse can spread *an acre* an hour with per-
fect ease.

The reader, we hope, will be able to compre-
hend the principle and construction of the *spread-*
er on perusing the following description.

It is a neatly made *cart*, adapted to either one
or two horses. In the bottom of it, about a foot
in the rear of the axle, a hopper is formed, within
which two rollers, reaching from side to side, re-
volve by means of cog-gearing, moved by a cog-
wheel located upon one of the hubs. The roll-
ers are made of iron, one of which is fluted to the

depth of about three-fourths of an inch; the other is smooth. one of these rollers is borne upwards by a spring, which is of great strength, but which is so constructed as to give way, or recede back whenever a stone too hard to be crushed presents itself for passage between the rollers. This is an object of great value, as it not only provides against a stoppage of the machinery, and consequently saves time, but preserves the machinery itself from injury.

The machinery is *simple*; easily kept in order, and may be repaired by any common country *smith*.

It is calculated for spreading *lime*, either dry or wet, (stone or shell,) *ashes*, *marl*, or *ground bones*.

When not used as a *lime-spreader*, by fitting in a slide, which also accompanies the cart, it may be used for all other farm or market purposes.

The *price* of the cart, together with its machinery, including the two cylinders for *dry* and *wet* lime, is \$110, a sum which should not be considered an object with any agriculturist who has a farm of a hundred acres or more to *lime*, as it would pay for itself in a single season in the saving of labor, besides doing the work infinitely better than in the old way.

A GOOD SALE OF DURHAMS—Three calves, 2 bulls and a heifer, were sold last week from Mr. Beltzhoover's establishment for \$750. One of the bull calves was $\frac{3}{4}$ th grade Durham, the other two were full bred. Their respective ages were 14 months, 6 months and 4 months, and the whole we learn were bought for the south. It is but last week we recorded the sale of three others from the same establishment for the same destination, and we record this latter fact with the more pleasure, as it is to us very gratifying evidence of the existence of a most laudable spirit among southern farmers and planters to improve their stock of cattle. And while we are thus discharging a duty in recording this sale, we may be permitted to ask agriculturists generally, in what they could make better investments than in such stock? How could they employ their time and means to greater advantage? A calf of the common breed of cattle of the ages of these would bring from 15 to \$30, according to his respective promise, while an improved short-horn, which takes but little if any more care, readily commands from \$200 to \$300. This simple fact we hope may serve to awaken our agricultural brethren to the importance of entering the lists as competitors for prizes so worthy of being won. Independently of the consideration of their being more valuable in a pecuniary point of view, the Durhams possess other

advantages of moment over the common breeds. The males come to maturity for beef at least two years earlier—weigh more, and yield more beef—are more docile—easier handled—and generally speaking the females give more and richer milk, and are therefore better adapted to the purposes of the dairy.

The following is an extract from a letter from Gen. James Hamilton, of South Carolina, to the editor of the Richmond Enquirer:

"I have negotiated my South Carolina rail-road loan for two millions with great despatch, and on the most advantageous terms, and have been treated with the utmost kindness by all persons with whom I have had any thing to do, in this great and glorious country, from which we have reason to be proud that we have sprung."

MICHIGAN—It is stated that the state of Michigan has a surplus of *one million* bushels of wheat for exportation the present year. This fact, if it be one, reflects great credit upon the agricultural skill, industry, and enterprise of the people of this infant member of the republic, and should serve to teach those of the old states a lesson, by which, if they are wise, they may profit.

THE TOBACCO TRADE.

No inconsiderable portion of the time of the publishers of this paper is occupied, almost daily, in answering letters of inquiry, generally as to particular facts interesting to the individuals who write them, but of comparatively little concern to us. We do our best, however, to comply with the requests of all of them, when we can do so with any sort of regard to our own pursuits and engagements. Of this class of claims upon our time is the following letter, received yesterday from a mercantile house in London, of which we have no other knowledge than what this letter affords. We shall send them with pleasure so much of the information which they ask for as is within our reach. As, however, the information, if of value to them, may be acceptable also to our own mercantile readers, we annex, for their information, a copy of our answer to it:—*Nat. Intel.*

LONDON, Aug. 9, 1838.

Gentlemen: We applied to Mr. Stevenson, in the hope that he could furnish us with the return of the number of hogsheads of tobacco exported from the United States for the year ending Sept. 30th, 1837; but, after having searched through his various Congressional Reports, he found that such particulars were not in his possession. This gentleman informed us that, if we wrote you, he had no doubt you would favor us with a copy—The article of tobacco is one of great interest with us, and if you would forward us a copy each year, as soon as published, of the quantity annually exported, we should feel greatly obliged.

We wish to know the number of hogsheads actually exported from the United States to foreign countries, as also the number sent coastwise, distinguishing tobacco from tobacco stalks or stems, if practicable.

We are, gentlemen, your most obed't serv'ts.
To Messrs. GALES & SEATON, Washington.

Office of National Intelligencer,
September 25, 1838.

Gentlemen: In reply to your letter of the 9th ultimo, we have the pleasure to inform you, that, according to the Treasury Statements, the export of Tobacco from the United States to Foreign Ports, for the year ending on the 30th September, 1837, amounted in quantity to one hundred thousand two hundred and thirty-two hogsheads, of which there were shipped direct to England 20,723 hogsheads, to Scotland 1010, and to Gibraltar 4249; to the Hanse towns and other parts of Germany 28,863 hogsheads; to Holland 22,730 hogsheads; to French ports 9,853; and to Belgium 2,138; the residue being dispersed to ports all over the world.

You say nothing of *manufactured Tobacco*—It may not be amiss to add, that the export of that article, for the same period, amounted, in estimated value, to \$3,615,591; of which the largest export (*viz.* \$1,262,340) was to the British North American colonies.

Of the exportation *coastwise* no return is made from the Treasury to Congress.

This information is extracted from an annual document, prepared in conformity to law, laid before Congress usually in March or April of each year, entitled "Statements of the Commerce and Navigation of the United States," and which comprises annually upwards of 300 tabular pages, of which it would be worth while, through some one of your New York friends, to obtain a copy yearly, as we cannot give you, annually, the information which we now furnish with pleasure.

Yours, respectfully, &c.

Messrs. — & —, London.

THE TOBACCO TRADE—We were led into an error in our last in stating the Exports of *Manufactured Tobacco* in money instead of quantity—The quantity exported in the last year was 3,615,591 pounds, and not of the value of so many dollars, as stated.

Whilst upon the subject of the Exports of Tobacco, it may be satisfactory to some of our readers to know how the export of the last year compares with the exportation of preceding years. The number of hogsheads exported during the twelve preceding years, was, in round numbers, as follows:

In 1825,	75,000	In 1831,	86,000
1826,	64,000	1832,	106,009
1827,	100,000	1833,	83,000
1828,	96,000	1834,	87,000
1829,	77,000	1835,	94,000
1830,	83,000	1836,	89,000

This is exclusive of the *Manufactured Tobacco* exported, which averages about 3,000,000 lbs. say 3000 hogsheads annually.—*Nat. Intel.*

This part of the country has perhaps seldom if ever experienced so severe a drought as prevails at present, and has continued during several weeks. Fortunately for the farming interest, it did not commence until the small grain and grass harvest had been completed; and corn had so far matured before it became severe, that it will probably shorten none but very late planted crops, if any

are injured by it. We are told by those who have both knowledge and experience in the raising of tobacco, that we have had no finer season for that crop. The streams of water are, however, generally dried up, or so fast disappearing that in some places both the people and their stock of cattle are suffering inconvenience for want of water, and we have at present no indications of approaching rain, by which to supply that indispensable article. A gentleman who has lived long in the country, and whose business calls him often abroad, told us several days since, that there had not been so little water in the streams for many years.—*Bowling Green (Mo.) Journal.*

LETTER FROM DARDENNE, Mo.

CONCLUDED.

As to the manner of putting in or covering seed wheat, I must beg permission to dissent from the plan recommended by Dr. McWhorton, in his address to the Agricultural Society of Richmond County, and published in No. 17 of the current vol. of the F. and G. The Dr. gives a decided preference to the harrow, for putting in the seed; this I think is a mistake; according to my experience, which is fully corroborated, by extensive and minute observation, the plough is to be preferred to the harrow; on the contrary, I consider it an indispensable implement, both in preparing the ground for the seed, and putting the ground in proper condition, after the seed is sown and ploughed in. And, that in this last operation, it should always pass in the same direction the plough does. On clay lands, it is indispensable that the wheat be put in with the plough, with the *mould board plough*, and that there be water-furrows at short intervals, and that they be open and free from all obstruction, so that surface water be carried off with as little delay and as perfectly as possible, and cross-harrowing would, in a great measure, defeat this end by chocking up the furrows. But even on clay land, where a green crop or a sod has been recently turned under, I put in with the harrow, not because I expect the best crop from that mode of putting in, because that is not the fact, but the reverse is; but, because I do not choose to expose this undecomposed vegetable matter, to direct atmospheric influences and suffer a large proportion of it to be evaporated, and carried off by the winds to feed plants at a distance that never could benefit me, but to keep it in reserve to sustain plants in future on the spot from which I shall derive the exclusive benefit. As to the proper time for sowing wheat, men differ, as they do on all subjects; very early sown wheat, it is conceded generally comes through an unfavorable winter, better than late sown, but then it is more, *much more* liable to destruction from Hessian fly, and if it should escape the fly, it never improves or tillers as well in the spring, as the late sown, and is, I believe, uniformly smaller strawed and shorter head-d than late sown wheat, and so far as my personal observation has enabled me to determine, very early sown wheat never does, under any circumstances, make a full crop; yet, from its greater certainty of maintaining itself through the winter here, which is the great desideratum with us, it is advisable to sow a part of the crop early, say about the 1st of September, and the remainder in the last days of

September, and the first eight days of October, and if postponed much beyond this last period, defer until the latter part of November, as in this last case the nutriment contained in the seed, will not be exhausted by the plant until spring, and if the young plant be hove upwards by the frost, it will carry the elements of subsistence with it.

As to the manures for wheat land, according to my experience, ashes is to be preferred to all other substances. In May, 1835, I ploughed under the first clover that I had sown, I hauled out and spread upon the grass, all the manure I could command, consisting of four different kinds, viz: stable manure, the most, but not all of which was unfermented; sheep pen manure, unfermented, a large amount of stack yard manure, consisting of straw and other offals of the grain crops in all stages of decomposition, and lastly, about thirty ox-cart loads of leached ashes, the greater portion of which had lain exposed to the weather for several years, and as I supposed much deteriorated in quality on that account, they were spread pretty thick, the whole turned under with the grass, and each kind producing a most excellent crop of corn, the ashes at least equal to any. I raised three successive crops of corn on the ground, and took off the last one at the ground last fall, and put in a crop of wheat; that part of the field manured with ashes produced the largest, the handsomest, and the heaviest wheat, that I have ever seen harvested. The sheep manure also produced very fine crop of beautiful wheat, but not equal to the ashes. The stable manure too did very well, but the straw manure scarcely told at all in the wheat crop.—In December, 1836, I hauled out 7 or 8 loads of ashes that were in my way, and spread them on grass land that was infested with a fine spungy native grass in spots, that was chocking out the clover and timothy, and it resuscitated those grasses and enabled them to overcome and effectually exterminate the little pest, (no sort of stock will feed upon it,) and where even a shovel full of the ashes was thrown, a most luxuriant crop of clover was produced; after taking off the crop of hay, and permitting the after growth to grow from 6 to 9 inches high, it was turned under and sown to wheat, and at harvest, and for two months previous, a stranger might have stood at the distance of two hundred yards from the field, and picked out a very short land, on which a load of ashes had been spread, so superior was the wheat there; but for want of room and time, this subject must be dismissed. We have been too dry and hot here for the most of vegetable crops; Irish potatoes are worthless, and cabbages not much better; turnips minus, beets, indifferent; parsnips and carrots do.; melons, have superabounded; and sweet potatoes will probably be tolerable. The country unusually healthy.

P. S. As evidence of the goodness of our corn crop, I make this P. S. to relate the fact, that not a single stalk of corn can be found in my entire crop, of more than thirty acres, that has not a respectable ear on it. I had searched, myself, repeatedly in vain, for a blank, and mentioned the circumstance to a neighbor to-day, who was here, and cultivates bottom, and has a most contemptible opinion of prairie land, and sent him through my crop to hunt a blank, and he returned, after a thorough search, without finding one. J. S.

A TREATISE ON WHEAT.

To the Editor of the Farmer's Cabinet.

Philadelphia, June 2, 1838.

DEAR SIR:—Last fall I obtained from London, Le Couteur's treatise on wheat, which, having read, I am convinced it ought to be laid before the Agriculturists of the United States.

At first, I intended to reprint the book entire and offer it for sale; but finding myself too much engaged to attend to the republication, I send it herewith to you that it may find its way to the wheat growers through the columns of the "Cabinet," provided you deem it an eligible subject for your useful paper.

Deeming, as I always have, the improvement of the soil and of the mind the *most important* of the interests of my country, I take great pleasure in thus contributing my mite to the former of these grand objects, whilst, as you know, I daily devote my time and humble powers to the advancement of the latter in preparation of her young citizens for future usefulness.

Your friend, respectfully,
I. I. HITCHCOCK.

We take great pleasure in availing ourselves of the opportunity offered us, by the politeness of Mr. HITCHCOCK, of laying before our readers the valuable treatise on wheat, referred to in the above letter. The work, since it has been placed in our hands, has been examined by several judicious and intelligent individuals, among whom were two eminent wheat growers; they all agreed as to its great merit, and united in recommending its republication. This we could not do conveniently in a separate form—and as it was deemed advisable to give it as extensive a circulation as possible, and as the subject is one in which all our readers are interested, we resolved to republish it in the present volume of the Farmer's Cabinet.

We learn from the dedication of this volume that Mr. Le Couteur's collection consisted of one hundred and fifty varieties, or sorts. Of course, some would thrive better than others in the particular soils and situations adapted to each. One ear of a superior variety, which he sowed, grain by grain, and suffered to tiller apart, produced 4lb. 4 oz of wheat; whereas another ear, of an inferior sort, treated in the same manner, produced only one pound ten ounces, is a proof that it is of paramount importance to select the most productive and farinaceous sorts for seed. It is therefore obvious, that a farmer who would have sown his entire crop with the last named variety, would have lost much, whereas the superior variety would have obtained him a large profit. Wheat growers will, we trust, bear this always in mind.

The facts given in the little work, we are now about to transplant to the pages of the Cabinet, are the result of five successive years' researches and close application. The writer recommends that if experiments are to be made on his suggestions, that they should first be on a small scale, and consequently they are attended with no hazard. In agriculture the results of experiments are necessarily tedious.

The great first principle which our author endeavors to advocate, is the proper adaptation of varieties of wheat, to the various soils and climate, since it is the suitableness of each sort to each soil, that will enable the farmer to reap a profit by

sowing one variety, when he would be unable to do so, by attempting to grow another of a seemingly better sort.

ON THE VARIETIES, PROPERTIES, AND CLASSIFICATION OF WHEAT.

By John Le Couteur.

WHEAT,—ITS ORIGIN AND VARIETIES.

It is not my intention to write an elaborate treatise on this subject, which, although interesting to the learned and scientific reader, would be of no practical utility to the farmer. It may, nevertheless, not be wholly uninteresting to look back a little into the history of wheat.

We learn from the sacred volume, that it was of the earliest culture, "*In the sweat of the face shalt thou eat bread.*" It is therefore to be presumed that what was coeval with the creation, and that upwards of a thousand years before the Christian era, some improvement in its culture, and some knowledge of a superior variety; had been attained, by the circumstance of its being stated, that "Judah traded in wheat of Minnith," perhaps meaning that such wheat of Minnith, was held to be in superior estimation. This may be the most ancient designation for any particular growth of wheat, the superiority of which, at that early period had engaged public attention. Columella, who wrote about the time of our Lord, makes some interesting remarks on wheat. "The chief and the most profitable corns for men, are common wheat, and bearded wheat. We have known several kinds of wheat; but of these we must chiefly sow what is called the red wheat, because it excels both in weight and brightness."

"The white wheat must be placed in the second rank, of which the best sort in bread is deficient in weight."

"The Trimestrian shall be the third, which husbandmen are mighty glad to make use of; for when, by reason of great rains, or any other cause, the early sowing has been omitted, they have recourse to this for their relief; it is a kind of white wheat. Pliny says, that this is the most delicious and the daintiest of any sort of wheat, exceeding white, but without much substance or strength, only proper for moist tracts of land, such as those of Italy, and some parts of Gaul, that it ripens equally, and that there is no sort of corn that suffers delay less, because it is so tender, that such ears of it that are ripe presently shed their grains; but in the stalk, it is in less danger than any other corn, for it holds its ear always upright, and does not contain the dews, which occasion blasting and mildew."

"The other sorts of wheat are altogether superfluous, unless any man has a mind to indulge a manifold variety, and a vain glorious fancy."

"But, of bearded wheat, we have commonly seen four sorts in use; namely, that which is called Clusinian, of a shining, bright, white color, a bearded wheat, which is called Venuculum, one sort of it is of a fiery red color, and another sort of it is white; but they are both heavier than the Clusinian. The Trimestrian, or that of three month's growth, which is called Halic astrum; and this is the chief, both for its weight and goodness. But these sorts, both of ordinary common wheat, and of bearded wheat, must, for these reasons, be kept by husbandmen, because it rarely happens

that any land is so situated that we can content ourselves with one sort of seed, some part of it happening, contrary to our expectation, to be wet or dry. But common wheat thrives best in a dry place, and bearded wheat is less affected by moisture."

Hence it appears the Romans were aware of the propriety of selecting their wheat, and that it was then believed, that winter or beardless wheat was best suited to dry uplands, and bearded wheat to low, or moist lands.

In addition to the winter wheats, some of which he states to be bearded, he distinctly alludes to Trimestrian, or spring wheat, of which I shall speak hereafter.

In Gerard's Herbal, printed in London, 1660, only five kinds of wheat are enumerated, which are thus spoken of:—

"1. *Triticum Spica Mutica*, white wheat. This kind of wheat, which Lobelius, distinguishing it by the eare, calleth *Spica Mutica*, is the most principal of all other, whose eares are altogether bare and naked, without awnes, or chaffie beards.

"2. The second kind of wheat, in root, stalks, joints, and blades, is like the precedent, differing only in eare, and number of grains, wherefore this kinde doth abound, having an eare consisting of many ranks, which seemeth to make the eare double or square. The root and grain is like the other, but not bare and naked, but bristled or bearded, with many small and sharp eiles, or awnes, not unlike to those of barley.

"3. Flat wheat is like unto the other kinds of wheat, in leaves, stalks and roots, but is bearded with rough and sharp eiles, wherein consists the difference. (I know not what our author means by flat wheat, but I conjecture it to be the long rough eared wheat, which hath blueish eares when it is ripe, in other things resembling the ordinary red wheat.)

"4. The fourth kinde is like the last described, and thus differeth from it, in that this kinde hath many eares, coming forth of one great eare, and the beards hereof be shorter than of the former kinde.

"5. Bright wheat is like the second before described, and differeth from it in that this kinde is four square, somewhat bright and shining, the other not.

"I think it a very fit thing (he states in a note) too adde in this place a rare observation, of the transmutation of one species into another, in plants, yet none that I have read have observed, that two several graines, perfect in each respect, did grow at any time in one eare, the which I saw this yeare 1632, in an eare of white wheat, which was found by my very good friend Master John Goodyer, a man second to none in industrie and searching of plants, nor in his judgment or knowledge of them. This eare of wheat was as large and faire as most are, and about the middle three or foure perfect oats in all respects: which being harde to be found, I held very worthy of setting downe, for some reasons, not to be insisted upon in this place."

He also entertained the opinion, that, wheat "*in a moist and darke soile, degenearteth sometime to be of another kind.*"

The singular fact mentioned above, relates to the chapter on the disposition of wheat to sport; but I have copied it as I found it. I principally wished to show how few varieties were then

known, and how indistinctly they were described.

Modern writers have merely designated a number of varieties, but no attempt appears to have ever been made to class them correctly, or to ascertain their relative values by comparison.

In Sinclair's "*Hortus Gramineus Woburnensis*," forty-two of the cultivated varieties are enumerated, as winter or spring wheats, according to the arrangement of Linnæus, which this illustrious writer has merely given as a sort of botanical classification. The *Maison Rustique*, for 1835, enumerates thirty-nine varieties; and although a short notice is given of them, it is by no means sufficient, as their farinaceous qualities are not explained, nor is the classification, according to Professor La Gasca's* notions, as he called all bearded wheats, spring wheats; though he admitted many of them would be increased in produce, by being sown as winter wheats, and that many winter wheats might be made as late, and produce as much as spring wheats.

It is a classification of wheat, pointing out the relative value, of varieties, in their quantity of meal, the weight of bran and pollards, with the weight of straw of each, and their adaptation to soils which is now required.

That this would be a desideratum, no one I imagine will deny; but that it requires time, attention, and perseverance, to make such discoveries, will also be conceded, when it is stated that I already possess upwards of one hundred and fifty varieties, or sub-varieties.

FAULTS IN ORDINARY PRACTICE.

It may be useful, first to point out the defects, in the present practice of husbandry with respect to wheat. The usual mode, with the best farmers, is to purchase seed wheat, where it is supposed to be clean, and pure, by the last expression, meaning wheat of one sort, or as little mixed as possible. But the ordinary practice, with those who may be said to supply the nation, is to procure seed wheat, where it can be got cheapest, without regard to mixture or purity, provided the sample is good, and appears likely to grow; others do worse, and imagine, that poor lean shrivelled wheat, the refuse of their own stock, or some coming from a distance, as a change, is all that is required to ensure a crop. Other carelessness, previous to, or after culture, need not here be treated of, as that would equally affect the best, as well as the worst seed.—One observation it would be well to make now, that the old practice of putting fresh manure to land intended for wheat, is decidedly dangerous, inasmuch as it tends to produce much grass or straw, and less grain, which grain is also of a dark and coarse nature. Stable dung should be applied plentifully the preparatory crop, and when lime or ashes are not procurable for the wheat crop, the early and free use of the hoe will supply their loss in a great measure; but none save decomposed stable dung should be applied to wheat, if that manure be necessary. This

*Professor La Gasca, Curator of the Royal Gardens at Madrid, whose extensive collections of the varieties of wheat and botanical researches into its nature as a plant, chiefly scientific and theoretical, led the author to make practical experiments, on the growth and properties of wheat as a nutriment, which has already led to important results.

is merely stated as a general observation, as there may be soils which without manure, would be wholly unproductive. The experience of the writer being at present chiefly limited to what are commonly held to be good soils.

The writer, in 1831, thought his crops were tolerable yet on Professor La Gasca walking through them, he selected from them twenty-three sorts, of which, some have since been discovered to be 3 weeks later in ripening than the others. Hence, I repeat, it must be obvious, that corn harvested in an unequal state of ripeness, cannot be the best for the purpose of making bread,—when the greater part of the grain has been reaped in the state the farmer considered was fittest for the miller; whilst the lesser part has been either in a milky state, or much over ripe, or some in states, between both.

It must be obvious, that the greatest quantity of farina or meal, is not obtained from wheat reaped in this manner; the largest quantity would be obtained, when every ear produced that fine, plump, thin-skinned, coffee-like looking grain which evidently contains much meal, in a delicate, transparent, thincoated bran, such as some Dantzic, selected from the *high-mixed* produces.

Hence it is assumed, that to have the best bread from any variety of wheat, is to have it pure, that supposing it to be grown on a level space, with one exposition, it will all ripen at the same time, slight differences being allowed for variation of soil, subsoil, or accidental unequal distribution of manure: but, speaking generally, it will ripen equally. Such variety, therefore, having ripened alike, will probably, if grown on the good Kentish, Essex, Devonshire, or other soils specially adapted to the growth of corn, be (if reaped at the proper moment) in that exact state of plump, round form, which promises the greatest quantity of flour. I must here observe, that the cause why so much wheat appears to have many shrivelled, lean, ill grown grains, in it, arises often from the unequal growth of the many varieties that lurk in the purest crop.

Much has been judiciously written on the growth and cultivation of wheat, improvement in those farms where care has been taken, perceptible even to superficial observers; but no writer has yet called the attention of the agricultural world to the cultivation of pure sorts, originating from one single grain. It is contended that this has been the root of all the evil; many have attempted to begin well, but few if any have thought of commencing from the original, and persevering in keeping it pure.

This idea struck the author so powerfully on the first conversation he had with Professor La Gasca, that it has never quitted him. His project was considered visionary and unattainable. Old farmers said, that as no farmer in the world had ever thought of separating and classing wheat, it could not be done, it was impossible to get a pure crop! The bees would mix the farina, mice would mix the grains, birds would do the same; if it had been feasible, it would have been tried before. Corn factors assured him that the climate of England was not calculated for the growth of such fine skinned wheat as that of Dantzic, Volhynia and Sandomir. Professor La Gasca alone perceived and approved of the author's project.

The learned Professor had been theoretically

employed in the classification and scientific examination of wheat as a plant, in the research and consideration of all its varieties; but it had escaped him to consider it in its properties, with relation to the food of man. This practical view the author took of it, and he determined to attempt to discover which were the most farinaceous and productive varieties, by comparing their characters and produce, one with another.

(To be Continued.)

From Chaptal's Agricultural Chymistry.

OF STIMULUS MANURES.

[The nature and action of manures explained and illustrated by M. John Anthony Chaptal, Count of Chanteleup, Peer of France, member of the institute, &c.]

[CONTINUED.]

I have hitherto spoken only of those manures which contain, at the same time with aliment necessary for vegetation, the salts which are inseparable from them; and which pass, in a state of solution, into the organs of plants to stimulate their action. I shall now speak particularly of these salts, explaining in what manner they act, and how their utility in vegetable economy differs materially from that of the alimentary principles; and showing that they can often be so employed as to increase the activity of vegetation.

It appears from the result of the critical experiments which Mr. Saussure has made upon the substances, that the salts and extracts, when dissolved in water, are absorbed by the roots of plants.

The absorption of hurtful salts is easy and abundant, in proportion as the plant is languishing, sickly, or mutilated. From this principle, established by experiments, it follows that the absorption of fluids and salts by the plants is not a passive and purely physical faculty; but one which is determined by those laws of vitality, which govern the plant during life. It is only when the power of these laws is weakened by a sick or languishing state of the plant, that external agents can act upon it in an absolute manner.—Plants do not draw in indifferently, or in the same quantity all substances which can be held in solution by water; they absorb, from preference, those which are least viscid.

From the preceding statements, it is rational to conclude, that plants do not maintain a strictly passive state in regard to their aliments; but that to a certain degree they have a preference, and taste, respecting them; and that the physical law predominates, to the injury of the vital organization, in proportion to the sickly or languishing condition of the plant.

All the soft and fibrous portions of plants, are evidently the product of the elaboration carried on by their organs, of the juices and gasses by which they are nourished. The saline particles, which plants contain, are unchanged, and such are furnished by the soil.

Whatever may be the variety of products presented to us by the vegetable kingdom, the elements which compose them are few in number.—They contain only oxygen, carbon, hydrogen, and azote, combined in an immense variety of proportions; some hundredths more or less, in the proportions of these constituent principles,

often cause an astonishing difference in the character of their products. It is this which occasions the slightest alteration produced in the organs to give rise to new compounds; bearing no resemblance to the first.

No one has ever disputed that the juices, the oils, the resins, the fibric, and other essential parts of vegetation, are the result of the action of the different organs of plants; and that the elements composing them were those of the bodies by which they are nourished, and which each combines in a manner peculiar to itself, and fitted to its own organization. There is, in all this, nothing like creation, but simply decomposition upon one side, and upon the other, a new combination of the elements, in different proportions.

Many philosophers, in other instances very correct, have asserted that plants themselves form, even by the act of vegetation, salts and earths, but as science has advanced, it has been ascertained that none of the experiments cited by them have been made with exactness. Some have watered plants with distilled water; others have raised them in washed sand; nearly all have allowed free access to the air to them; many have analyzed, with a certain degree of care, the soil upon which they raised these plants; and nearly all have concluded, that the salts and earth which they found in them, and of which they could demonstrate neither the existence, nor even the quantity if found, in the different substances concurring to produce vegetation, must be the work of the plant. But does not the after disturbed atmosphere frequently change the salts, and the earths, which it deposits upon plants? Does not the dust which it carries, alight upon the upper surfaces of leaves and branches? Water, the best distilled, according to the experiments of Davy, contains some alkaline and earthy atoms.

Messrs. Schrade and Braconnot have published the results of their experiments, by which they have been led to believe, that salts and earths are created in the organs of plants; but M. Lassaigne has proved, that the salts and earths, contained in the developed plant, are the same as those that are found in the seeds from which they sprang.

M. Th. De Saussure, whose opinion upon these matters is of great weight, has proved that plants do not create any of these substances.

Besides, if the formation of certain salts be a power of the plant itself, why does not the *salsola* afford more marine salt when it grows at a distance from the sea? Why under the same circumstances, does not the "*tamarisk*" furnish more sulphate of soda? And, finally, why does the *turnsol* remain destitute of salt-petre, if raised upon a soil which does not contain it?

Be this doctrine as it may, there are two practical truths which we do know; the first is, that certain salts enter, if I may so speak, as natural elements into the composition of some plants; since it is found that they languish in earths not containing those substances; and that the plants absorb them abundantly, when they are present. The second is, that the salts ought always to be united with manures; the excellence of which is increased, provided it does not exceed the wants of the plants, and that the action be not too energetic.

I may add, that a plant absorbs, from preference, the salt most analogous to its nature. The sal-

sola, which grows by the side of the *tamarisk*, sucks up from the earth marine salt; whilst the *tamarisk* imbibes from it the sulphate of soda. It is proved by the analysis of different kinds, that have been raised upon the same ground, that they do not furnish the same salts, or that, at least, they present a great difference in the qualities they contain.

The salts are necessary to plants; they facilitate the action of their organs so much, that they are often employed without mixture.

Limestone submitted to the action of fire, loses the carbonic acid, which is one of its constituent principles, and the result is a whitish stone, opaque and sonorous, of a sharp and burning taste, absorbing water with noise and heat, and forming with it a paste, which is a perfect *hydrate*. Good limestone may be deprived of 50 per cent of its weight by calcination, but it is seldom that the heat of the kilns is sufficient to deprive it of more than from 35 to 40 per cent. when the carbonate is dry.

As soon as lime is exposed to the air, it absorbs moisture from it with great readiness; gradually cracking and breaking in pieces. It likewise absorbs the carbonic acid contained in the atmosphere, and is thus insensibly reduced to an impalpable powder.

In this manner, lime resumes the principle of which it has been deprived by calcination, and is reconstituted limestone, or calcareous carbonate, without regaining its solidity. In proportion as the recombination goes on, the lime loses the properties which it had acquired from the action of fire; it ceases to be caustic, its solubility in water is diminished, and its affinity for that fluid becomes almost nothing.

The lime used in agriculture is that which has been slacked by air. Unslacked lime destroys vegetation, at least if it be not combined with manures which moderate its action, or with such bodies as can furnish enough carbonic acid to saturate it.

We are indebted to Davy for some experiments which throw a great light upon the action of lime upon vegetation. He has proved that the fibrous portion of plants, deprived of all the particles which can be dissolved by water, presents another series, soluble after having been for sometime emacerated with lime. Thus lime may be very efficaciously employed, when it is wished to convert dry wood or fibrous roots and stalks, to the nourishment of plants. Limestone broken, and lime completely restored to the state of a carbonate, do not produce this effect; it is necessary to employ lime slacked with water, and mixed with a fresh portion of that fluid, and the fibrous substances must remain for some time exposed to the action of solution. In the case of which I have just spoken, the lime renders soluble and suited to the nourishment of plants, some substances, which, in their natural state, do not possess this characteristic; and, for this purpose the use of it may be very advantageous. Thus, when it is desirable to convert ligneous and fibrous plants into manure, it may be done by treating them with lime.

If it be required to employ, as manure, some substance, whether animal or vegetable, which are by nature soluble in water, their mixture with lime forms new compounds of natures completely

different from their constituent principles, but which may, in time, become very proper for the nutriment of plants; this requires some explanation.

The compounds formed by lime, with nearly all the soft animal or vegetable substance, which will combine with it, are insoluble in water; accordingly, lime destroys, or greatly diminishes the property of fermentation in the large part of them; but these same compounds, at length under a change from being exposed for a length of time to the constant action of air and water; the lime passing to the state of a carbonate, and the animal and vegetable substances being gradually decomposed, and furnishing new products capable of applying nourishment to plants; as that lime answers two great purposes for nutriment; *first*, it disposes certain insoluble bodies to form by their decomposition soluble compounds; and, *secondly*, it prolongs the action and nutritive virtue of some soft and insoluble animal and vegetable substances, beyond the term they would continue to act, if they were not made to enter into combination with lime.

Very striking instances of the facts, which I have just stated, may be found in some of the operations performed in various branches of manufactures. For instance, in the process of refining sugars to free them from the vegetable extract and albumen which they contain, the milk of lime is employed, which, combining with these substances, rises to the surface of the liquid in the form of a thick and insoluble scum; this, if carried immediately into the fields, destroys vegetation, but if deposited in a ditch during a year, it forms one of the most fertilizing manures with which I am acquainted. I have established this fact, by having employed, in this manner, during the period of a dozen years, the abundant foam arising from the sugar of beets in my manufactory.

To be Continued.

CORN MARKET AND ITS EFFECT.

We have before us the Liverpool Circular of Buchanan & Son, for Sept. 1st, in which the following remarks are made.—*U. S. Gaz.*

LIVERPOOL, 1st Sept. 1838.

Sirs—It is satisfactory to be enabled to report a favourable change in the weather, which has now assumed a settled appearance, and should it continue, fears which have existed for the fate of our harvest will be lessened or removed. The recent advance in the Corn market, will release a capital long locked up, and give a stimulus for a time to a branch of business which has been dormant or uncertain. From the manufacturing districts accounts are very satisfactory, so that with average crops of Grain, selling at excellent prices, we may reasonably anticipate a prosperous state of business to the conclusion of the present, if not throughout the ensuing year.

As an appendage to the above, take the following:

Our Corn Market has been flat throughout the week; on Sunday last the weather took up, and with exception of the day, has since been fine and seasonable. The consequence is, that but little business was done at Tuesday's market, nor yet at that of yesterday. Free Wheat has declined during the week (that is at the two markets) 1s. to 1s. 3d. per 70 lbs., and oats 3d. to 4d. per 45

lbs.; even at these reductions, buyers supply themselves sparingly. We may make a similar remark on Wheat and Flour under the lock, the duties on which, it will be seen, are much reduced, but the price declines, though the duty falls.—Good red Baltic Wheat, may be purchased in bond at 8s. 9d a 9s. 3d. per 70 lbs. Flour as in quality, is offered at 34s. a38, per bbl. without finding buyers. If the weather continues favourable, our crops of Oats and Barley will be excellent; but Wheat under any and the most favourable circumstances must be short; still with settled weather, and a reduced consumption, consequent on high prices, nothing like unduly high prices need be anticipated.

On the 6th of September, it is remarked the weather is very fine, and wheat and flour at a serious decline.

We refer to this matter as an occasion of felicitation. Every bushel of grain that has to be supplied to England, subtracts its value from the amount of capital in London, which would otherwise be devoted to business, and especially aid its proportion in the mercantile business of the United States. The loss of the crops in England is not a mere diversion of trade—it is so much abstracted from business, so much capital taken from the common stock.

We subjoin another paragraph from a Circular issued on the 11th of August, when great fears were apprehended for the crop; it alludes to the subject in this light:

A great degree of anxiety has existed, and does still exist, as to the result of the coming harvest. The future course of business will be much influenced thereby. Should the crop as a whole, prove tolerably good, then any import which may be required would perhaps be an advantage rather than otherwise. If on the contrary, a serious and considerable injury should ensue, its general effects would be very prejudicial in many ways, and in none more so than the actual extension of capital, to the extent or value of the eventual deficiency.

From the Genesee Farmer.

MANUFACTURE OF BEET SUGAR.

An address was delivered in this town a few days since, on the subject of manufacture of Beet Sugar, by Mr. Childs, who has spent some months in Europe. He alluded to the German method, lately discovered, which had been patented in every country in Europe. Some of our shrewd ones went to work, and the result of their "experiments" will be found in the Hampshire Republican which accompanies this.

H. FERRY.

Northampton, April 15, 1838.

The German improvement over the French method of making beet sugar, a patent affair in Europe, consists *simply in drying the beets*, which are then reduced to a powder by grinding, and changed into a decoction by adding water. The experiment has been most thoroughly tried by Mr. Zachariah Wilder, of this town, which resulted in *complete success*. Mr. W. by this process, which, we understand, is as simple as that of making a cup of tea from aromatic herbs, has succeeded in extracting *ten per cent of sugar from the cured beet*—and he is confident that at least *twelve per cent* can be obtained, at another experiment. For his efforts in prosecuting his experiments to signal success, Mr. Wilder deserves the unqualified thanks of the agricultural world. The result of his labors will give an

impetus to the culture of beets in Hampshire county, which cannot fail to be productive of lasting good. But to the process again. The dried powder of the beet was found to yield its saccharine immediately, as the decoction was found to be as sweet as boiled maple syrup, the moment the water was added to the powder. The means for the clarification of the decoction were very simple. Animal charcoal and lime were the only agents employed. This eminently successful experiment proves the fact, that the immensely important article of sugar can be manufactured by any intelligent farmer's household, as easily as bread, pies or cakes can be made and baked. A rich garden spot of a quarter of an acre, can produce beets enough to make a thousand pounds of sugar; no heavy capital or incorporated company is required to carry on the business. Every individual can make a pound of Indian meal.—This important fact has just been proved.—Now let us look at the amount of sugar brought into Northampton last year. Why, it amounted to *one hundred and seven thousand pounds*, which together with molasses consumed, would cost over \$10,000. This is no inconsiderable sum to be expended by our citizens annually. A dozen resolute farmers, by their influence and labors combined, can create that sum from their lands this summer in the culture of the beet. At least, so we think.

SELECTING SEED CORN.

One important method of improvement in agriculture is by the selection of good seed. This is not only essential for the purpose of preventing deterioration. Almost any seed may be improved by proper care, and if any farmer has a valuable kind and rests satisfied without improvement, he must not suppose that it will continue good without that pains which is usually practised to improve it.

We often hear farmers and gardeners speak of their having had a valuable kind of grain, peas, or something else of importance, and now, they say, they have *run out*, and they know not where to find any of the kind; so having managed in such a way as to allow an excellent kind of vegetable to degenerate, they have recourse to some other kind that has been improved under the judicious care of more skilful cultivators.

Corn is a very profitable crop to the farmer, as the fodder, with good management in curing, and in feeding, is usually worth as much as a good crop of grass on the same ground; the grain is cooked in many ways and forms an excellent food for man, and it forms a good food alone or is a valuable ingredient in mixed food for stock. The importance of this crop, and the difficulties in raising it in cool seasons, should stimulate every farmer to learn what kind is the best, and induce those who have good kinds to select seed judiciously, that they may in a measure overcome the troubles that attend its cultivation. And here we would urge one very important consideration upon the farmer, which, we believe, will pass unnoticed by many to their very serious disadvantage; that is, this season has been unusually propitious to the corn crop, and the farmer should calculate to plant seed suited to the short, cool seasons for a number of years last past, rather than calculate on a succession of such seasons as the present.

The earliest ears that ripen, if they are well filled, of good form and large size, should be selected for seed, and marked by tying some husks together, or in some other way, that they may be

distinguished at harvest; or if the corn be well ripened it may be gathered at the time the selection is made. If a very valuable variety of corn be cultivated that is rather late for the climate and it be desirable to acclimate it, the very earliest ears must be selected without so much regard to their size and beauty; but if the corn be sufficiently early, and it be necessary to improve in the size of the ears and in productiveness, then none should be selected but the large, handsome ears that are well filled, and that grow on stalks that have two good ears or more, the best of which only should be taken.

Though a kind of corn may be sufficiently early for the climate, the ears that first ripen, being otherwise as desired for the above purposes of improvement, should be selected, otherwise it will grow later and adapt itself to the climate where it is cultivated; and not only that, as corn originated in the southern climate, it is prone, when cultivated in the north, to grow later and adapt itself to the longer season in the climate of its origin. Therefore care is necessary in order that early corn may continue to be early; and if the seed be not selected when the corn is ripening, so that the earliest ears can be distinguished, the large late ears will be likely to be selected, and thus the crop will be later and later every year.

Seed corn should be selected from those stalks that are large at bottom, and are not very high, but run up of a regular taper, and have the ears set low. If convenient the corn should not be shelled from the cob long before it is planted, as that part where the chit starts is very tender and has a thin covering for its protection, but it is well protected by the cob before it is shelled. As that part of the corn that contains moisture, and seems to be the seat of life in the vegetable process is embedded in the cob, with a very tender skin over it, it is evident that on exposure, when taken from the cob, the moisture will gradually evaporate; and the vitality be destroyed. We have never made nor heard of experiments being made on this point, but from the examination of a kernel corn, and the manner in which the soft, moist part is protected in the cob, and by the compactness of the neighboring kernels, we have no doubt, that corn on the cob will retain its vitality much longer, probably as long again on the cob as it will off.—*Yankee (Portland) Farmer.*

The News and the Market.—The New York Journal of Commerce of Friday, says:—The news from England has not induced holders of flour to lower their prices materially, but there have been few buyers this day. A cargo of 2000 bu. prime N. Carolina wheat, to arrive, has just been sold \$2 per bush. Cotton is not changed in prices, though there is rather less activity to-day than yesterday.

A HALF DURHAM COW FOR SALE.

The subscriber has for sale a beautiful, fashionable roan half Durham Cow. She is fresh in milk and only 4 years old. Her price is \$75. Applications, post-paid, to be made to

Who has also for sale several full bred Devons, males and females. oc 2 4t

SEED WHEAT & RYE.

275 bushels white chaff bearded wheat
200 do red do do
250 do Italian and Tuscany spring do
All the above of superior quality, and selected particularly for seed. o 2 R. SINCLAIR, Jr. & CO.

ROBERT SINCLAIR, Jr. & CO. MANUFACTURERS & SEEDSMEN.

Light street, near Pratt street wharf, offer for sale, An extensive assortment of Agricultural and horticultural Implements and Seeds, comprising all that are required to stock the most extensive plantation. Particular attention is directed towards the various departments, where the most competent workmen are employed, and durable materials used.

The assortment of Ploughs is large and various, among which are the Double mould board, Sub-soil, Self-Sharp-ening, Improved Davis, &c. &c.

Wheat Fans—Com. Dutch, Crank Shake and Watkins' Patent.

Corn Shellers—for manual and horse power, warranted to shell 2a700 bushels of Corn per day.

Corn and Cob Crushers—for breaking the cob in suitable size for feeding stock. Stock raisers will find their interest promoted by using this machine by a saving of full 30 per cent.

Cylindrical Straw Cutters—Of these there are several sizes. The late improvements made have rendered them the most perfect and effective straw cutter in this country.

Cultivators, for cultivating corn, tobacco, &c.

Drill and Sowing Machines, for drilling vegetable and grass seeds.

Vegetable Cutters, for slicing Turnips, mangel wortzle, pumpkins, &c.

Harrow—Expanding, com. square and diamond shape. Common Dutch Straw Cutters.

Patent Seeding Plough, made with 2 or 3 mould boards, which are formed as practice and science dictates to be the most perfect mode. The mould and landboard of these ploughs present two edges or sides, which can be reversed when the first course wears out.

Garden Seeds of every variety.

Field Seeds—English and Italian Ray Grass, Trefoil, Burnet, St. Foin, Lucerne, white and red Clover; green and blue Grass; early Potatoes; Gama Grass Roots; Baden and Mercer Corn; Dutton and early white Flint; several sorts garden corn, Italian and Tuscany Spring wheat; Timothy, herds and orchard Grass; Millet, &c.

Trees and Plants supplied at the shortest notice, from the Clairmont Nurseries near this city.

Wanted, prime lots Seed Grain and Grass Seeds.

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A BOAR AND SOW FOR SALE.

The subscriber is authorised to sell a boar and sow, half Berkshire; the boar is large of his age, being 18 months old, the sow 12 months old, and in pig by the boar; they are both fine animals, and will be sold for \$25. Apply to oc 2 4t ED P. ROBERTS.

\$10 REWARD.

Strayed or stolen from the subscriber on the 26th of May last, one cow and two heifers. The cow is a large fine looking pale red cow, with short horns inclining inwards, one of which is rather shorter than the other; she has a restless look out of her eyes.

The largest of the heifers was 27 months old on the first of the present month, is slender built, of blood red or mahogany color, and resembles very much the Devon breed.

The other heifer was 18 months old on the 10th Sept. is a pale red buffalo, rather chunkily built.

Whoever returns the said cattle to the subscriber at his residence, 2 miles from this city, on the Philadelphia road, adjoining the first turnpike gate, shall receive the above reward, or \$5 for the cow and \$2 1/2 a head for the heifers.

Any person who may know where said cattle are, who will give such information as may lead to their recovery by the subscriber, shall receive half the reward, or a proportionate sum for either of them. E. P. ROBERTS.

oc 2

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IMPROVED DURHAM SHORT-HORNS.

Early in October next, Mr. Whittaker's 2d sale of pure improved Short Horns, will be held at Powelton, near Philadelphia. Due notice will be given of the day of sale, when pedigrees in detail will be furnished.

The subscriber is authorized by Col. Powel to state that all the best cattle which he has at any time imported, and the improved Short-Horns, which he considered the best in England, were either in Mr. Whittaker's possession, or had been derived from his fold. In this sale, Col. Powel has not the slightest interest.

C. J. WOLBERT, Auctioneer.

9t

aug 28

BALTIMORE PRODUCE MARKET.
These Prices are carefully corrected every Monday

	PER	FROM	TO
BEANS, white field,.....	bushel.	1 25	
CATTLE, on the hoof,.....	100lbs	6 50	8 00
CORN, yellow.....	bushel.	98	
White.....	"	96	
COTTON, Virginia,.....	pound	9	11
North Carolina,.....	"	9 1/2	11
Upland,.....	"	9 1/2	11
Louisiana—Alabama.....	"	11 1/2	12
FEATHERS,.....	pound.	45	50
FLAXSEED,.....	bushel.	1 12	
FLOUR & MEAL—Best wh. wh't fam.	barrel.	10 00	10 50
Do. do. baker's.....	"	8 25	
SuperHow. st. from stores	"	8 25	
Wagon price,.....	"	7 75	
City Mills, super.....	"	8 25	
extra.....	"	8 50	
Susquehanna,.....	"		
Rye,.....	"		
Kiln-dried Meal, in hhds.	hhd.		
do. in bbls.....	bbl.		
GRASS SEEDS, wholes. red Clover,	bushel.		
Kentucky blue.....	"	2 50	3 00
Timothy (herds of the north)	"	2 25	2 50
Orchard,.....	"	2 00	2 50
Tall meadow Oat,.....	"	3 00	
Herds, or red top,.....	"	90	1 00
HAY, in bulk,.....	ton.	12 00	16 00
HEMP, country, dew rotted,.....	pound.	6	7
water rotted,.....	"	7	
HOGS, on the hoof,.....	100lb.	7 00	7 50
Slaughtered,.....	"		
HOPS—first sort,.....	pound.	9	
second,.....	"	7	
refuse,.....	"	5	
LIME,.....	bushel.	32	33
MUSTARD SEED, Domestic,—; blk.	"	3 50	4 00
OATS,.....	"	37	
PEAS, red eye,.....	bushel.		1 12
Black eye,.....	"	1 00	1 12
Lady,.....	"		
PLASTER PARIS, in the stone, cargo,	ton.	3 87	6 00
Ground,.....	barrel.	1 50	
PALMA CHRISTA BEAN,.....	bushel.		
RAGS,.....	pound.	3	4
RYE,.....	bushel.	93	
Susquehanna,.....	"		none
TOBACCO, crop, common,.....	100lbs	4 00	4 50
" brown and red,.....	"	4 00	6 00
" fine red,.....	"	8 00	10 00
" wrappery, suitable	"		
for segars,.....	"	10 00	20 00
" yellow and red,...	"	8 00	10 00
" good yellow,.....	"	8 00	12 00
" fine yellow,.....	"	12 00	16 00
Seconds, as in quality, ..	"		
ground leaf,.....	"		
Virginia,.....	"	4 50	6 00
Rappahannock,.....	"		
Kentucky,.....	"	5 00	8 00
WHEAT, white,.....	bushel.	1 90	2 00
Red, best.....	"	1 70	1 75
Maryland.....	"	1 70	1 75
WHISKEY, 1st pf. in bbls.....	gallon.	45	46
" in hhds.....	"	46	
" wagon price,.....	"		
WAGON FREIGHTS, to Pittsburgh, ..	100 lbs	2 25	
To Wheeling,.....	"	2 50	
WOOL, Prime & Saxon Fleeces,...	pound.	50 to 55	
Full Merino,.....	"	45 50	
Three fourths Merino,.....	"	40 45	
One half do.....	"	35 40	
Common & one fourth Meri.	"	35 40	
Pulled,.....	"	30 33	

DURHAM & DEVON BULL.
Forsale, a young bull, 18 months old. He was got by a full bred Durham bull of the strain of Col. Powel, out of a full bred Devon cow. His color is a strawberry roan shewing his affinity to the blood of his sire. His pedigree will be warranted, and his price is \$75, cash on delivery.
EDWARD P. ROBERTS,
Editor Farmer & Gardener.
sc 11

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,.....	barrel.		
BACON, hams, new, Balt. cured....	pound.	15	16
Shoulders,..... do.....	"	13	14
Middlings,..... do.....	"	13	14
Assorted, country,.....	"	14	
BUTTER, printed, in lbs. & half lbs.	"	31	
Roll,.....	"		37 1/2
CIDER,.....	barrel.		
CALVES, three to six weeks old....	each.	5 00	6 00
Cows, new milch,.....	"	25 00	40 00
Dry,.....	"	12 00	15 00
CORN MEAL, for family use,.....	100lbs.	1 75	
CHOP RYE,.....	"	1 75	2 00
Eggs,.....	dozen.	19 1/2	
FISH, Shad, No. 1, Susquehanna, barrel.		9 75	10 00
No. 2,.....	"	9 50	
Herrings, salted, No. 1,.....	"	4 50	4 62
Mackerel, No. 1,..... No. 2.....	"		
No. 3,.....	"		
Cod, salted,.....	cwt.	3 25	3 37
LARD,.....	pound.		11

BANK NOTE TABLE.
Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

		VIRGINIA.
U. S. Bank,.....	par	Farmers Bank of Virgi. par
Branch at Baltimore,.....	do	Bank of Virginia,..... do
Other Branches,.....	do	Branch at Fredericksburg, do
MARYLAND.		Petersburg,..... do
Banks in Baltimore,.....	par	Norfolk,..... do
Hagerstown,.....	do	Winchester,..... do
Frederick,.....	do	Lynchburg,..... do
Westminster,.....	do	Danville,..... do
Farmers' Bank of Mary'd, do	do	Bank of Valley, Winch. par
Do. payable at Easton,.....	do	Branch at Romney,..... par
Salisbury,..... 1 per ct. dis.		Do. Charlestown,..... par
Cumberland,.....	par	Do. Leesburg,..... par
Millington,.....	do	Wheeling Banks,..... 2 1/2
DISTRICT.		Ohio Banks, generally 3
Washington,.....		New Jersey Banks gen. 3
Georgetown,.....	Banks, 1 p.c.	New York City,..... par
Alexandria,.....		New York State,..... do 1/2
PENNSYLVANIA.		Massachusetts,..... 1 1/2
Philadelphia,.....	par	Connecticut,..... 1 1/2
Chambersburg,.....	1/2	New Hampshire,..... 1 1/2
Gettysburg,.....	do	Maine,..... 1 1/2
Pittsburg,.....	2 1/2	Rhode Island,..... 1 1/2
York,.....	1/2	North Carolina,..... 3 1/2
Other Pennsylvania Bks. 2		South Carolina,..... 4 1/2
Delaware [under \$5],..... 4		Georgia,..... 5 1/2
Do. [over \$5],..... 1 1/2		New Orleans,..... 7 1/2
Michigan Banks,..... 10		
Canadian do..... 10		

MULBERRY TREES.
200,000 genuine Mulberry Trees, and as many more as may be wanted, of the most improved kinds—
Consisting of the best selected varieties now in use, for cultivation, feeding worms, and making silk;—being acclimated to this country, and adapted to either warm or cold climates, affording a rare opportunity for Companies or individuals to be supplied, from the most extensive collection of mulberry trees ever seen in any village within the United States.
Autumn is decidedly the best time for removal, and orders left with
Messrs. I. B. Col. Sec'y of the Connecticut Silk Manufacturing Company, Hartford; Alonzo Wakeman, at the office of the American Institute, No. 187 Broadway, N. Y.; Thomas Lloyd, Jr. No. 236 Filbert street, Philadelphia, Pa.; Luther I. Cox, Baltimore, Md.; B. Snider & Co. Savannah, Ga.; Bliss Jenkins & Co. Mobile, Al; James Lyman, St. Louis, Mo.; Case & Judd, Columbus, O.; G. Harwood, Rochester, N. Y.; and the publishers of this advertisement, or with the subscriber, in Northampton, Mass.
Orders left with the above gentlemen will be promptly attended to, and each will be furnished with samples of the foliage.
Several valuable farms may be had with or without Mulberry plantations. Apply at the office of
D. STEBBINS.
Northampton, Aug. 22, 1838.
7t au 28

AGRICULTURAL IMPLEMENTS AND SEED STORE.

THE SUBSCRIBER informs the public that he keeps constantly on hand at his old establishment in Pratt-street, near Hanover, a large assortment of PLOUGHS and Agricultural IMPLEMENTS generally, which are too numerous to name in an advertisement, but invites such of the public who are in want of any articles in his line to call, assuring them that his work shall be as well made, of as good materials, and on as reasonable terms as any in the State. His patent Cylindrical Straw Cutters made on his late improved plan are kept at all times on hand, of various sizes and prices, with wood and iron frames—and he challenges its equal in any part of the world. Having an iron foundry attached to my establishment, all orders for Ploughs and Machine castings can be furnished at short notice and on reasonable terms.
In store—Herds and Orchard GRASS SEEDS, of prime quality; also, Landreth's superior GARDEN SEEDS. He is also agent for Mr. Samuel Reeves' Nursery, near Salem, New Jersey, whose fruit trees he can recommend to the public with confidence. Those wishing Trees from that Nursery this fall should hand in their orders immediately.
J. S. EASTMAN.

N. B. On hand, two Threshing Machines, with portable horse powers, that can be highly recommended and warranted equal to any in use.

FOR SALE,
A short horn bull, YOUNG REGENT, sired by Dr. Hosack's bull Malcolm, and his dam is believed to be a full blood Durham short-horn. Young Regent is handsomely marked with white and brown spots, of fine form and size, about 3 years old last spring; his calves are fine, as may be seen on this farm. He will be sold a great bargain, if an early application is made to
ROBT. SINCLAIR,
se 11 3t Clairmont Nursery, near Baltimore.

NEW SEED STORE.
The subscriber has just received a FRESH SUPPLY OF GRASS SEEDS, warranted to be genuine and fresh, suitable to the approaching season, such as
Timothy
Orchard
Herds or Red Top
Also, BUCKWHEAT for fall seeding, as an inlay, preparatory to the wheat crop.
TURNIP SEEDS, of different kinds and of the best quality. Farmers and Gardeners will find it to their advantage to call and supply themselves liberally of this seed, to supersede in some measure their loss occasioned by the drought. Also BIRD SEED of every kind.
All orders by mail or otherwise, for CASH or good REFERENCES, will be faithfully and duly executed, with despatch. FARM and GARDEN TOOLS of all kinds on best terms, furnished by
THOMAS DENNY,
au 21 4t Grant street, near Pratt street.

SPLENDID BLOODED STOCK FOR SALE.
The proprietor of Covington farm will dispose of the following fine bulls on reasonable terms, v. z.
One bull two and a half years old
One do. six months old.
of the improved Durham short horn breed; the dam of the first was got by the celebrated bull Bolivar; for size, form and beauty they are not surpassed by any animal in the state.
Three Devon Bulls, one of which is seven years old next spring, and the largest Devon in the State. The Devons are from the stock of the late Wm. Patterson, and of undoubted purity.
Two half Devon bulls.
Two b. lls. half improved Durham short horn, and half Devon.
One splendid bull, a cross of the Bakewell, Alderney and Devon.
One bull, half Alderney and half Holstein.
These fine animals may be seen at Covington farm, near Petersburg, Frederick county, Md. on application to James L. Hawkins, Baltimore, or to
se 11 f FREDERICK EBERT, Manager.

A DURHAM BULL.
For sale, a superior Bull—he is of fine size and unexceptionable pedigree, which will be given next week—he comes from a strain of deep milkers, and is himself the sire of several fine animals. Price \$500.
je 26 3

THE FARMER & GARDENER.

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, E. P. ROBERTS AND SAMUEL SANDS—EDITED BY E. P. ROBERTS.

No. 24.

BALTIMORE, MD. OCT. 9, 1838.

Vol. V.

— This publication is the successor of the late **AMERICAN FARMER** and is published at the office, at the N. W. corner of Baltimore and North streets, over the Patriot office, at two DOLLARS AND FIFTY CENTS per annum, if paid within one month from the time of subscribing, or \$3 if after that time. All letters to be post paid.

BALTIMORE: TUESDAY, OCT. 9, 1838.

SALES OF DURHAMS.

We commend to such of our readers as may be sceptical upon the value of Durham stock, the perusal of the two accounts of sales recently made in Kentucky of two herds—and no one we think will doubt the ability of Kentuckians to determine in matters of the kind.

WHEAT AND RYE.

Those who have not yet got in their fall grain, will do well to make haste and get it in as soon as possible, and above all, to take pains in preparing their ground, as on that greatly depends the success of their respective crops. No man should attempt to seed either Wheat or Rye in ground that is not well and deeply ploughed, and thoroughly pulverized by rolling and harrowing—and above all things, we recommend, that each be put in with the plough.

MANURES.

Manure has been, with great force and propriety, said to be the farmer's gold mine; and hence, the means by which it is, at little cost, to be accumulated, is an object of great moment, and should elicit the most intense attention; for without manure it is literally impossible to make the earth produce profitably, or to farm with any degree of pleasure, as toiling without the chance of emolument or credit, always brings to the mind of the individual thus unfortunately circumstanced, feelings as corroding as they are mortifying. We know that there are many persons, so situated as not to have within their possession those means best adapted to the manipulation of manures upon an extensive scale, or in the least commensurate with the wants of a farm under culture. But admitting the existence of this difficulty, to its utmost extent, still there are but few farmers who have not resources upon their estates calculated to enable them to prepare manure to a considerable

extent, and with whom nothing is wanting but the will, to put it within their power, annually, to manure their corn, potatoes and truck grounds, sufficiently to ensure remunerating crops. To do this, however, effectually, it is but fair we should in advance admonish the reader that he must prepare himself to use industry and practice economy in time. Every spare moment must be improved, and his energies directed towards the collection and proper husbanding and use of all such materials as may be within his possession.

To begin then, we would point out that the scrapings of the roads, the weeds and bushes from the lanes, head-lands and fence corners, all rubbish of every description susceptible of decomposition, on or about the farm, should at all spare times be collected, hauled in and spread upon the bed of the barn-yard: leaves from the woods, pine shatters, rotten and decayed wood, marsh mud and the scrapings of drains and ditches, should also find a similar destination; so also, the corn-stalks, and, indeed, every substance calculated by its decomposition to be converted into the food of vegetables. By carefully placing such substances upon the bed of your barn-yard, you will not only add to the quantity of your supply of manures, but will provide yourself with an article so excellent in quality as to be little inferior to that furnished by your horses and cattle, as it is universally admitted, that the materials we have pointed out not only serve as absorbents—depositories—of the liquid portions of the product of the barn-yard and stable, but by decomposition and absorption of animal and atmospherical matter, become so meliorated in character, as to present one of the most valuable varieties of food that can be offered to growing plants.

Having in our enumeration of materials for the composition of manures, mentioned *pine shatters*, we will briefly remark, that there are but few if any vegetable substances entitled to more attention from farmers, as, besides possessing nutritive properties to considerable extent, and being, when in a state of active decomposition, prompt and efficient in their action upon vegetation, it is said to be highly stimulating, and that it exerts the latter power without in the least endangering the vitality or healthful integrity of any growing plants to which they may be applied.

If the *pine-shatters*, then, are thus fructifying in their tendency, what ample resources have the owners of pine forests for carrying on the process of meliorating those portions of their lands appropriated to tillage?

While we are upon this subject, we would remark that the intrinsic value of such composts would be greatly improved, if a few bushels of lime were spread on the manure piles in such way as that all parts of the mass would derive benefit from its action. Two bushels to the double-horse cart-load would impart an inappreciable value to it, inasmuch as besides promoting more rapid decomposition, it would by its mechanical action improve the texture and greatly add to the capacity of the compound for promoting the growth and product of vegetables.

Those who may own estates on which marl in any of its forms exist, need hardly be told by us, that by placing it, in early fall, in their barn-yard to receive the advantages of frost, the treading of the stock, the mellowing influence of atmosphere, and the salts, mucilage, &c. from the staling of the cattle, that its value will be immensely increased for present and future use.

Sea-weed. Those persons who may have lands bordering on bays or rivers, on whose shores the sea-weed may be periodically washed up, and who may have been in the habit of using it, need not be reminded that it is a most excellent manure, but to those who possess the advantage alluded to, and may not have embraced the opportunity of improving their soils by its use, it may not be inopportune to remark, that there are but few vegetable substances which yield so liberal a portion of nutriment to the roots of plants, or which can be so advantageously applied as a fertilizer of the soil for one or two crops. Besides the virtues arising from the vegetable matter which it contains, it possesses, to a very great extent, others of an eminently nutritive and beneficial nature. Being charged with salts of an alkaline nature, it has a fair proportion of mucilage, which may be taken up as food by the roots of the plants, carbonic acid, and the oxide of carbon, substances known to be favorable to vegetation. As several of its constituent principles are of a gaseous nature, it should always be used as fresh as possible, in order that the earth may derive the benefit of the

volatile parts being incorporated with it, while the process of decomposition is going on, as thereby much is saved calculated to advance the growth of plants, and to increase the luxuriant capacity of the soil.

With respect to the soils to which it is best adapted, it may be said that it suits those of a light texture best, because being of a more transient character, in its effects, than many other manures, it is possibly best fitted to a course of husbandry, such as is followed on lands of the character named; they being more frequently subjected to ploughing, and therefore, oftener presenting the opportunity of manuring. Sea-weed, however, will be found on trial to answer well on all soils, and are equally well adapted to every variety of plants which require active nutriment.

Bay and river sand. In Europe much use is made of sand taken from the sea-shore, and it is there found of infinite service, in the melioration of stiff clays as well as light soils. To the first, besides the mechanical influence which it exerts in disintegrating and dividing the tenacious particles of which it is composed, and thereby admitting the more free ingress of sun and air, the salt and putrid matter of which it is in part composed, imparts to the soil a new life, enabling, it through the first named ingredient, to attract moisture, while by the second, through its nutritious properties, it encourages the growth of plants. On light soils the application of sea-sand presents the same anomaly of action as do lime, for its effect applied on such soils is precisely the reverse of that it exerts on clays; for as in the latter it renders them less adhesive, and consequently more friable, so in the former it makes them, through the agency of its putrid and saline matter, more tenacious. In England, those farmers of Norfolk whose estates border on the ocean use the sea-sand extensively, and find it, by the test of experience, an excellent manure. Their mode of using it is to spread it over their stable and fold yards to the depth of several feet in the fall, and litter over it. If then the sea-sand has been there proved to be of service as food for plants, why should not the shores of our salt-water bays, rivers, and creeks, be to a considerable extent so many sources of manure? We can see no good and sufficient reason why they should not. The sand thereon, to be sure, is not so strongly impregnated with salt, but then it is equally accessible to the exuviae of fish, to the deposit of mucilaginous substances, and to vegetable and animal bodies, all of which possess the principles of the food of plants in a greater or less degree. It is known that the mere mixing of different soils

together, where neither are remarkable for fertility, often improve each, and lend to the two collectively a power of fertility which singly was not inherent in either, and why should not sand thus constituted prove of great intrinsic value?

As we have much confidence in the fertilizing virtues of the sands we have pointed out, we sincerely wish that some enterprising farmer contiguous to salt water, would make a fair experiment, and report to us the result, as we are sure he would find his account in it. Let him haul thirty or forty loads on an acre, situated on a field on a river or creek, and we are certain the ensuing year he will enlarge his experiment, unless he be deaf to the injunctions of interest. The labor and expense would be trifling, and it is assuredly worth the trial.

SMITH'S LIME SPREADER.

We have been favored with a copy of the following letter for insertion; it was addressed by its author to a distinguished gentleman on the Eastern Shore.

FRANKLIN, BALTIMORE Co., }
September 21, 1838. }

DEAR SIR: I have your esteemed favor in which you request my opinion of the 'Lime Spreader,' invented by our ingenious countryman, Francis H. Smith, Esq., and manufactured by Mr. Jonathan S. Eastman of Baltimore. Having had this machine in operation, upon my farm for more than a year, during which time, I have carefully observed its performances and structure, I take great pleasure in giving my testimony in its favor, as an invention of great merit, and one likely to become extensively useful, especially in our own State, and such other States as resort to lime for the purpose of renovating and resuscitating their worn out and exhausted soils. It is well known, that the attention of our agriculturists has, within the last few years, been awakened to the value of lime, as an agent of great efficacy and power, in restoring our lands to a healthy and vigorous condition. Having limestone in abundance, it remained for us to ascertain the proper quantities to be given to different kinds of soil, and to discover how, and in what manner, it could be most easily, conveniently and expeditiously applied. That the old method, of scattering it about by hand, was a wretched one, no one will deny. Nor, before the invention of Mr. Smith, was there any method of doing so, that was not both painful and laborious, greatly injurious to the eyes of the people, and at all times repulsive to them. It could only be performed in calm weather, and then, even with great care, was done in a most irregular and insufficient manner. For my own part, I seldom had the courage to order my hands to the performance of labor to which they manifested so great an aversion. And, consequently, I did not lime, in ten years, as much as I have now done, in a single year, with the use of this admirable invention. The reason is this; the temptation now held out, by the machine, to perform the work, with ease and expedition, has induced me, from time to time, to use up our broken days, in the spreading of lime. And, thus, in the course of a few months, apparently without

feeling it, we have clothed several of our fields with this renovating mantle.

And, let me remark here, that one of the strongest inducements for the purchase of the 'Lime Spreader' is, that it is *always ready for service*. The consuming delays, of *preparation*, for liming, in the old way, and which, in nine cases out of ten induced the farmer to put off, and procrastinate, until, finally, the work was never performed, are entirely removed.

The present machine can be taken hold of at any moment. And with it, and the very slender force of a *man*, a *boy*, and a couple of horses, one in the 'Lime Spreader,' and the other in a small wagon to supply the lime, *one acre per hour* may be limed in the very best manner.

The 'Lime Spreader' is a *common farm cart*, made indeed in a superior manner, but not differing essentially, from most other *horse carts*, in its form and construction. It is, of course, capable of being used upon all occasions with one or two horses, for the *ordinary purposes of a farm*. And, as it may be thus used, the farmer, to whose operations a *cart* is at all times necessary, need only incur a trifling additional expense, in the purchase of one, to have this valuable machine in his possession.

To this cart, running across the bottom, near the axle-tree, is attached a *cast iron cylinder*, or rather a *grooved*, or *fluted roller*, with *cog-wheels* on one end. This roller is thrown into *gear*, or out of *gear*, by the putting in, or taking out, of a small *iron pin*. When in *gear*, the moving of the cart, puts the whole in motion. As the cart moves on, the descending lime fills, successively, the *flutes* or *grooves* in the *roller*, the revolving of which, spreads a most beautiful sheet of falling lime, and covers the ground, from wheel to wheel, in the *most even and regular manner*. The *quantity*, also, may be regulated at pleasure by a change of the *cog-wheels*.

One great merit of this invention is, that you may rely upon the *quantity per acre* put upon your ground. And that, that quantity, will be *equally spread every where*, which never could be done in the old way. Indeed, the spreading is done with so much *evenness* and *regularity* that a field, limed in this way, appears to be covered with a handsome fall of snow.

It may be remarked further, that the construction of the machinery is both simple and durable. Not likely to get out of order.

When the 'spreader' is used for other purposes than the spreading of lime, the *roller* is protected from injury by a *shifting board*, which, *being in its place*, the cart bottom is tight and snug. But, when taken out, it exposes the roller, in the manner of a mill-hopper, to receive and spread, the descending lime.

The cart being filled with lime, may be driven any where without spreading it; but when you reach the ground intended to be limed, all you have to do, is, to insert the *iron pin*, which connects the *cogs* of the *ROLLER* to the *wheels* of the cart, and then, a small boy, leading the horse forward, the whole moves off without further aid. The beautiful descending sheet of lime cannot but elicit the admiration of every beholder. I speak now of *dry lime*. If the *lime* be *wet*, it may be necessary to place a person on the cart to keep the roller free.

I have now had a "Lime Spreader" upon my farm for upwards of a year. I can safely and conscientiously say, that, in my opinion, it is a machine of the greatest value to the farmer—one which no agriculturist, who has the ambition to resuscitate his worn out lands, should be without, as, if lime be used at all, the expense of the "spreader" will be saved in a very short time. Besides, the owner of a machine will be sure to lime his lands, while, of those who do not own one, not one in ten will be prompted to perform that important part of agricultural labor. Since I have owned the machine, I have limed a considerable part of a pretty large estate, with ease and convenience—a work which I could not, and certainly would not, have performed in the old way.

Do not rely upon your manager, who, of course, will be prejudiced against it. For, without knowing him personally, I do know, that, he belongs to a class of men, who invariably set their faces against all innovations upon old practices. No doubt he will tell you, even before he sees the Spreader, that he "knows all about them" these inventions—that they will never do no good—no how."

But never mind all this—order the machine to be used, use it right, and you will not repent the purchase.

With sentiments of great respect, I remain,
Your obed't serv't,

WM. H. FREEMAN.

From the Norfolk Beacon.

The cultivation of the Mulberry is not only becoming a subject of great interest in the United States generally, but in this immediate section of the country. Many are already engaged in planting the *Morus Multicaulis*, and snug profits have already been realized. We hail its cultivation, however, as the first measure of introducing the silk facture among us, and of establishing that branch of business firmly in our Borough. The soil of the neighboring country is admirably adapted to the rearing of the tree, while the town of Norfolk presents advantages for the location of factories unequalled, we believe, by any other place in the Union. With proper energy and spirit, Norfolk might accomplish in the silk business what Paisley, Glasgow, Dundee, Birmingham and Manchester have done and are now doing in other departments of industry. Let it be remembered that the brisk linen manufacture of Scotland is from a raw material obtained from Russia, and ought we not to make an effort, with the mulberry and the silk worm at our doors, to follow such a good example?

The silk business is destined to become one of the most important branches of American industry. As late as 1795, England imported her cotton fabrics from India, and until the commencement of this century, imported all her cotton from Egypt and India. The introduction of steam into the factory enabled England to engage in making cotton fabrics, which she soon exported to India, sold at lower prices than those for which Indian manufacture could be procured. The whole cotton manufacture was thus engrossed by Great Britain, until the United States entered the market. But our own history furnishes an example of the

prompt and profitable introduction of an article which is now the great medium of American exchange; we mean cotton. As late as 1793, when Mr. Jay negotiated the famous British Treaty, that eminent man who penned the most able of the revolutionary state-papers, and who resigned his office as Chief Justice of the United States to enable him to embark on his mission, was ignorant of the existence of cotton as an article of export from the United States; and at this day the reader need not be told of the value of that "great and specie paying bank" of the South. There is strong ground to believe that the Mulberry is destined to work a revolution as thorough as that wrought by Cotton, and experience has shown that the climate of the South is most congenial to the production of this valuable tree. Let our citizens persevere in their zeal, and they need not envy the wandering Southron on the banks of the Red River or the Colorado. We refer to the following article from the *Silk Grower*, on the mode of preserving Mulberry trees through the winter, which may be found useful to a certain extent in our climate:

"Many persons who desire to engage in the cultivation of the *Morus Multicaulis*, are deterred from purchasing trees in the fall, when they can be bought from 20 to 40 per cent. cheaper than in the spring, through fear that they may not be able to preserve them until the planting season. Keeping the *Morus Multicaulis* through the winter, with perfect safety and with trifling expense, is an easy matter. The trees may be kept in a cellar, with dry earth about their roots, or they may be lain down horizontally on the ground in layers two feet thick, and be covered with dry sand. Both these modes are perfectly safe, and will answer the purpose. We, however, prefer another method which is as follows: Dig a pit in the ground from two to three feet deep, according to the length of the trees, loosely in bundles of fifty or one hundred each, and place them in the pit, roots downward, near together, fill the space between the bundles with earth, so as nearly to cover the tops of them. We prefer this method because it is less labor than the others, and equally safe. It should be understood that we now speak of the manner of preserving trees of one summer's growth to be planted for propagation. Those who may desire to obtain trees, will no doubt best consult their own interest by purchasing in October and November, should holders be willing to sell at that season, as they can be procured cheaper, and there are then better assortments to select from. The many applications we are every week receiving for the *Morus Multicaulis*, to be delivered the ensuing fall, and the generous prices that purchasers are willing to pay, have induced a belief that the supply of trees will by no means equal the demand; and that it will not be possible to procure them next spring unless at extravagant prices. It is true that there are many of the *Morus Multicaulis* now growing in this vicinity, but not half the number that were expected by those who are engaged in their culture, and greatly as the trees increase in number, the purchasers multiply in a much larger ratio. The public are well satisfied that our country can produce silk in abundance, that the Chinese Mulberry is every thing that its friends claim for it, and that its propagation will be a good business for at least 20 years to come."

SILK.

The tax now paid by the people of New Jersey for foreign manufactured silks, amounts according to estimates made from the ratio of her population, to a sum rising six hundred thousand dollars per year. But if the people will only set themselves to work like good citizens, and make this important article a home production, and a home manufacture, all this vast amount of money may be kept at home. The cultivation of the tree which feeds the worm is engrossing all the attention; whereas the great object, the raising of silk seems to be almost entirely neglected. Our Legislature with the sagacity of wise political economists, have offered a premium for all silk raised by our own citizens for the ensuing five years; but nothing is offered for the production of trees. How long will the blight of prejudice, narrow pauperizing prejudice, keep us from seeing and following up our true interest? To the industrious poor above all others, here are the means of being enriched; not immediately indeed, but ultimately and surely. And the poorest may engage in it, for the sum of fifty cents and three feet square of ground, are all the capital required to commence with. Every man should buy a single tree, plant it in his garden and make a beginning; and let it ever be borne in mind, that the independence of the citizen constitutes the independence of the state.—*Belvidere (N. J.) Apollo*.

(From the New England Farmer.)

MR. EDITOR: Can you inform me why I cannot raise pumpkins? I have taken pains not only to get good seed, but also seed from abroad, and planted it apparently on good ground, and yet on account of the moon or the season, or the seed, or some other cause, I have not got half a dozen pumpkins fit for pies on my whole farm. It has been suggested to me of late by a friend, that it was for the want of old seed. An old farmer of his acquaintance tells him that he plants seed that is from 2 to 3 years old, and sometimes 4 years old. I asked a neighbor of mine the other day, if he ever heard of the thing? he said he had, and this neighbor, although not a farmer by profession, but a blacksmith, nevertheless has some good ideas about farming, and withal raises some large pumpkins, and has one now in his garden, which he and some others think will weigh fifty pounds. And now, Mr. Editor, seeing that pumpkins are of so much value, especially in this section of country, that we can hardly keep *Thanksgiving* without pumpkin pie, would it not be well to give the above considerations to the public, through the columns of your agricultural Journal. If you think so, you would oblige at least one agriculturist, if I may be permitted to use that term, by so doing, but if you have other matter of more importance or more interesting, please to lay this aside and take that. When I get a little more experienced in farming, perhaps you will hear from me again; for although I like your journal very well, yet it does not exactly coincide with all my views and experience about farming; but, at present, I shall read, examine and practise in silence. Yours, &c.

J. MITCHELL.

Chester, Cty., Sept. 21, 1838.

REMARKS.

We are truly sorry that our correspondent has been so unsuccessful in his attempt to raise pumpkins. The thought of keeping thanksgiving without a pumpkin pie is surely almost insupportable and especially for a Connecticut man. Should he fail in obtaining a supply in his immediate neighborhood for that important day, we shall be very happy to forward him one, if he will say in what way it shall be sent, as we have been more fortunate in our farming operations. The culture of the pumpkin is so simple, that we supposed every farmer raised them in abundance, without difficulty. The most common method is to plant them among corn, sticking a seed in every other hill at the first hoeing, but the better way is to plant them by themselves, when fine pumpkins are wanted. The land should be made very rich in the first place. The hills should in this case stand 7 or 8 feet apart every way, or even ten feet if the ground is in first rate order. It is generally supposed that the seed, of all vines, is better for being 4 or 5 years old. Mr. Marshall, an Englishman, who published a book on gardening some years since, when speaking of melon seed, observes, that, "if new seed only can be had, it should be carried a week or two in the breeches pocket, to dry away some of the more watery particles!"

To which Mr. Cobbett in his treatise on gardening exclaims, "What should we do here, where no breeches are worn." We are of opinion that old seed is preferable to new, and perhaps new seed may be improved as Mr. Marshall directs by carrying it in the breeches pockets! we have never tried the experiment, but we know those who do prepare their melon seed by filling their pockets with it a few weeks before they wish to plant it, and who believe the quality of the seed is improved thereby. We have a few hills of pumpkins, which were planted by themselves that have given us a great quantity. One was picked a few days since which weighed 47 lb. and there are many others of nearly the same size. A vine accidentally came up in a rich part of our garden, in consequence of a partial destruction of the young crop around it by worms; it was suffered to remain; it spread out in every direction 10 or 15 feet, giving a good supply of fine yellow pumpkins.

J. B.

Roxbury, Sept. 24th, 1838.

To the Editor of the New England Farmer.

SIR,—The inclosed letter was written three years since, (as its date imports) but withheld from a fear, that I had annoyed the public with lucerne grass, and that people would begin to call me the "man with one idea." My late success has induced me to publish it, and I invite all farmers who may have opportunity to visit my third crop this dry year. It will not be cut before the 6th of October. It is a beautiful sight in such a season.

JOHN LOWELL.

From the New England Farmer.

LUCERNE GRASS.

MR. FESSENDEN: I recur once more, in spite of the ill success of my former efforts, to the subject of this invaluable grass. I feel a full conviction that it will be, sooner or later, the favorite

grass of the New England States, for whose soil and climate, it is peculiarly adapted. It will finally take the place of the Dutch clover throughout New England. It is better adapted to our soil. It bears our severe drought much better than any grass we have hitherto cultivated.

I begin by stating my own experience. It is of fifteen years duration. That is no trifling trial. I go on regularly in the extension of its culture, and upon dry, sandy, and gravelly lands, it will forever be for me, the favorite grass. It may be asked, what are the peculiar advantages which you have experienced from this grass? I answer, first, double crops in weight at least, from the same extent of ground. The Lucerne will give in this state, two good crops, the first season in which it is sown. Is there any grass, which will do this? It will endure in good heart for five years? Will clover do this? It will endure the severest droughts when all other grasses fail. What grass will do this? It is the favorite grass of the horse and the cow. It will fatten them faster than any other grass. It will do as much for a horse as an ample supply of grass, and four quarts of grain a day, in keeping him in flesh and strength.

But many persons have failed in attempts to raise it. And what then? Does it follow that it is not worthy of culture? By no means. If one man uniformly succeeds for fifteen years, there must be some good reasons why others do not succeed. Let us try to seek out the causes of their ill success. It is not climate, because it stands our severest winters unhurt, when clover fails. It stands our severe droughts, when clover dies.

It has been intimated, that my success is owing to peculiar care, and culture. This is not so. It is treated exactly like the red clover, and I give to it, purposely, my worst lands. Not that it does not do honor to the best. It will reward the cultivator in the best soils.

What then have been the causes of its failure with many cultivators? I will endeavor to state my opinion on that subject. The lucerne will not grow in most meadow lands at all. It cannot bear low lands. It will die, if water rests upon it in winter. On uplands, it has failed from an insufficiency of seed. It requires 20 pounds to the acre, and the price of the seed has been so high that our farmers would not buy it or in too small quantities, but it can be afforded from Europe at 14 cents per pound, though our seedsmen cannot afford to sell it at that price on account of the limited demand. It is like every thing else, if the demand is small, the supply will be small and high. My object is, to recommend its culture, and when it becomes general, the seed will be abundant and cheap, but no man must expect a crop without 20 pounds to the acre of seed, but as it endures five years at least, and pays for its cost the first season, it is a miserable and wretched economy, which, withholding the seed, decries the plant as unproductive.

It is with me, the richest treasure. My farm is small, it is true, but it is a grazing farm, and my produce is 20 tons of hay. Surely the experience of such a farmer for 15 years, is worth something.

JOHN LOWELL.

August 6, 1835.

I have already cut two crops from lucerne, sown

in April last; and two crops from lucerne two years old, and two crops of hay from lucerne three years old, at the rate of three tons per acre. I expect two crops more from each. These are facts, notorious to them, who pass by my grounds.

What have we like it? Lucerne must be, and will be the grass of the south shore of this state, and other light lands of New England.

Let farmers, who pass this way visit my lands, let them see the grass, and the hay produce from it, and inquire of those who feed my stock, and they will be satisfied, that the lucerne is yet to be a blessing to their farms.

From the New England Farmer.

INDIAN CORN.

More than a hundred fold!!—Old Connecticut yet—Connecticut forever!!

MR. EDITOR—In the year 1837, in the garden of Elias Tully, of Saybrook, Connecticut, there grew two kernels of corn. One of these kernels produced 5 stalks—11 ears and 2147 kernels. The other produced 6 stalks—15 ears and 2276 kernels! Let the rich prairies, the fertile river bottoms, and other parts of the great West beat this if they can.

Yours, as ever,

AN OBSERVER.

From the New England Farmer.

MEXICAN CORN.

MR. EDITOR—A variety of corn, said to be from Mexico, and said to be a very large and a very productive kind, was planted in several places in 1834. But one kernel, however, of this variety was known to vegetate. That one stalk stood a towering giant in the garden of Elisha Tully, of Saybrook, Conn., and on the 13th of Sept. 1834, though it had neither tasselled out, or eared out, it measured 16 feet in height, without stretching up any of its leaves, as it stood in the garden. The height was ascertained by setting up a pole by it, and measuring the pole. The reader will not be likely to realize the great height to which the corn above mentioned had arrived, unless he measures 16 feet up the side of a house, a tree, &c., and then looks at it. The frost cut off this corn before it had made any seed. Would not this kind of Mexican corn make a prodigious burden of green corn fodder if sowed broadcast on good ground?

Yours, respectfully,

ASA M. HOLT.

Silk—The cultivation of the mulberry, and the rearing of silk has become the rage within a few weeks. Those who went into the cultivation of the mulberry, two years ago, have just got their plants ready for the present flood tide, and are realizing from 500 to 1000 per cent. on their investments. Several gentlemen have made fortunes. Mr. RUTTER, of our borough, one of the pioneers in this vicinity, we are pleased to learn, has made a very handsome income; and our silk company, we suppose, have done well. A number of individuals in West Chester, are taking hold of the matter, determined to made their fortunes in this honorable business.—*Village Record*.

From Chaptal's Agricultural Chymistry.

OF STIMULUS MANURES.

[The nature and action of manures explained and illustrated by M. John Anthony Chaptal, Count of Chanteleup, Peer of France, member of the institute, &c.]

[CONTINUED.]

From the explanations to be continued, which I have given to the manner in which lime acts, we may draw some conclusions in regard to its uses, and the manner in which it should be employed in them, to have the results arising from its application, conform to those which have been produced by enlightened experiments.

It is acknowledged that lime is principally useful upon fallow lands, which are broken up; upon grass lands, whether natural or artificial, which are prepared for cultivation; and upon muddy lands, which are to be put into a state fit for cultivation. It is well known, that in all these cases, there exists in the land a greater or less quantity of roots, which by the application of lime, may be made to serve more immediately for manure, by the solubility it will give to the products formed by them; but this effect can be produced neither by spreading the lime or the land, at the time of sowing the seed, nor by throwing it upon the soil without covering it, nor by sprinkling it upon the plants which have begun to unfold; it is necessary to scatter it upon the land before the first tilling, and only as fast as it can be mixed with the soil, and place it in contact with the roots and stalks upon which it is to act, and at the end of some months this action is completed.

Independently of this effect, which in my opinion is the most important, lime exercises other powers, which make it a very valuable agent in agriculture. It cannot be denied, that the long existence and the barrenness of a marshy or turfy soil, give rise on such lands to myriads of insects, which repeated tillages, and frequent changes of crops can destroy only in a great length of time; whilst the mixture of lime with the earth performs the work immediately. It is certain, that some plants which injure the soil and the crops, escape every tilling, but are immediately destroyed by the action of lime. It is clear, that to produce these effects, the lime must be applied in the caustic state. The mode of preparing it is as follows:

As lime absorbs water with avidity, exhaling vapor and producing noise and heat, and crumbling into pieces, that liquid may be thrown upon it, till the whole mass is reduced to a dry and impalpable powder; and it is in this state that it must be used.

In order to preserve the husbandman from the deleterious effects upon the lungs, of this light powder, it is best to mix it with some moistened earth; and in order that it may preserve all its virtue, it is necessary that it should be immediately buried in the soil by ploughing.

The custom of employing air-slacked lime, which is lime in the state of a sub-carbonate, is spreading in France every year and is productive of good results. This lime is, undoubtedly, less active than that which has been slacked by water; but it requires fewer precautions in the use of it, and is not liable to so many inconveniences.

When lime has been acted upon by the air, till it is reduced to the state of an impalpable powder, it is used with great advantage by mixing it with dung-hill manure; it serves to correct the acidity arising from the decomposition of certain portions of this, such as the marsh of grapes, &c. and it absorbs the juices that would flow off and be lost, or would be too rapidly decomposed; it likewise fixes the juices, which would otherwise ascend into the atmosphere. This mixture spread upon the field excites vegetation, warms cold soils, divides those which are compact, regulates the fermentation of manures, and furnishes to plants gradually, and in proportion to their wants, the nutritive principles with which it is impregnated.

Lime slacked by air, does not entirely lose the property of being soluble in water, and when used, it is carried into the organs of plants by that liquid, producing those good effects, which arise from the employment of saline substances, in small quantities.

Limestone saturated with carbonic acid, though it may be reduced to powder, does not produce any of the good effects arising from the use of quick lime. M. Tennant obtained from 20 to 22 per cent. by throwing upon this mixture a little more nitric acid, diluted with water, than was necessary to saturate it; the liquor remained turbid, and of a whitish color.

I have always observed, that all earths, of whatever natures containing magnesia, render the waters covering them whitish; and that the agitation of these waters by the wind, takes from them all their transparency. When such waters are from ponds or pools, they are called white waters.

Magnesian earths possess but little fertility; and when the lime employed for agricultural purposes contains magnesia, its beneficial effects do not follow. In order to account for this difference of action, it is necessary to take into consideration, that magnesia has less affinity for carbonic acid than lime has, and that, consequently, when the earths are mingled together, the magnesia preserves its causticity, even when the lime is saturated with carbonic acid, and brought back to the state of limestone. Thus it appears that magnesia can preserve its caustic properties, and exercise its deleterious effects upon vegetation, during a long time.

The use of plaster, or gypsum, which has become common in Europe as a manure, is one of the most important improvements that has ever been made in agriculture. It has even been introduced into America, where it was made known by Franklin upon his return from Paris. As this celebrated philosopher wished that the effects of this manure should strike the gaze of all cultivators, he wrote in great letters, formed by the use of the ground plaster, in a field of clover lying upon the great road to Washington, "This has been plastered." The prodigious vegetation which was developed in the plastered portion led him to adopt this method. Volumes upon the excellence of plaster would not have produced so speedy a revolution. From that period the Americans have imported great quantities of plaster of Paris.

There are, however, some tracts of country where the use of plaster has been attempted without success. But this arose from its being one of the original constituents of the soil, which

derive no advantage from the addition of a new quantity. The existence of this salt, naturally in those lands upon which plaster produced little or no effect, has been proved by analysis.

Gypsum is a compound of sulphuric acid and lime, containing more or less of the water of crystallization. A moderate heat deprives it of its water of crystallization, and renders it opaque. It can then be reduced to powder and employed in that state. Though the prepared gypsum absorbs water with avidity, and its consistency is affected by the mixture, it may be preserved many months without its properties being sensibly affected. Nothing more is necessary for this purpose than to head it up in tight casks.

Gypsum carefully broken is likewise much used, and there are some farmers who attribute to it the same efficacy as is possessed by that prepared by heat. I have myself made some comparative experiments, and observed that the baked plaster evidently produced a little more effect the first year, but during the three years which followed, the difference was almost nothing.

The gypsum is scattered by the hand, at the time when the leaves of the plants begin to cover the ground, and it is best to take advantage of a light rain for the operation, as it is thought to be beneficial to have the leaves moistened, in order that they retain a small portion of the powder.

The effect of the gypsum is preceptible during three or four years. The use of it can be resumed at the end of that time. The quantity in which it is usually employed is from 2½ cwt. to 3 1-8 cwt. per acre.

Much has been said upon the effects of plaster. Some have pretended that its action might be attributed to the force with which it absorbs water. But it solidifies that liquid, and does not part with it either to the atmosphere, or any other surrounding body; so that this doctrine does not appear well founded. Besides, if its action were from this cause, it would be momentary, and would cease after the first rains; and this is contradicted by experience. Moreover, it is believed that the broken gypsum has not the property of absorbing water; and yet it produces nearly the same effects as the baked and powdered plaster.

Others have thought that plaster acted only by favoring the putrefactions of animal substances, and the decomposition of manures. But Davy has refuted this opinion by direct experiment, placing it beyond a doubt, that the mixture of plaster with manure, whether animal or vegetable, does not facilitate decomposition.

There are others, again, who attribute the effects of plaster to its stimulating properties; and these adopt, in its utmost extent, the opinion which I have formed upon this subject. It still remains, however, to be explained, why this salt, which is not more stimulating than many others, acts with so much better effect, and why its action is continued during several years, whilst that of others is exhausted in so much less time, why this salt never dries plants, whilst the others, if employed in excess, burn them up and destroy them. These are problems which remain to be solved, and of which the solution cannot be found in the stimulating properties of the plaster.

Hitherto it has been sufficient to state the good effects of plaster, in order that agriculture might be enriched by so important a discovery. The

fact alone is sufficient for the farmer, and it is not the only one in which the theory can add nothing to the practice. I shall, however, give here a few ideas upon the action of plaster; and I publish them with the more confidence, because they appear to me to be deduced from well-established analogies.

It is proved, that those salts which have a base of lime or alkali are the most abundant in plants. Analysis also shows that the different salts do not exist in the same proportion, either in plants of different kinds, or in the different parts of the same plant.

On the other hand, observation shows us every day, that these substances, to be beneficial to plants, must be presented to them in proper proportions; for if too great a quantity of salts easily soluble in water, be mixed with the soil, the plants will wither and die; though they will languish, if totally deprived of the salts. A little marine salt, mixed with dung and spread upon the soil, excites the organs of plants and promotes vegetation; but too much will produce a pernicious effect upon them.

If we now consider that salts can act upon plants, only in proportion to their solubility in water, through which medium they are conveyed, we can conceive, that those which are least valuable will be productive of the greatest advantage.

Water can hold in solution at any one time but a small portion of these saline substances; and as they will always be conveyed into plants in the same proportions, their effect will be equal and constant, and will be continued till the soil be exhausted of the salts. The length of this period will be according to the quantity of them which is contained in the soil, and to the plants not being rendered liable to receiving more of them than it needs.

The solubility of plaster in water appears to be precisely the degree most beneficial; 300 parts of water will dissolve only one of plaster. Its action is therefore constant and uniform, without being hurtful. The organs of plants are excited by it without being irritated and corroded, as they are by those salts which, being more soluble in water, are carried more abundantly into plants producing upon them the most injurious effects.

(To be Continued.)

GREATS SALES OF DURHAM CATTLE.

WOODLAND, Sept. 12, 1838.

To the Editor of the Franklin Farmer:

DEAR SIR—According to your request I send you the list of sales of Cattle on the — inst. My full blooded Cattle cost \$1,450, two years since, and produced on Saturday \$2,745. I also sold a bull calf, dam Britania, last fall, when all kinds of business was depressed, for \$250.—Volante lost her first calf, which at this time would have been worth, if living, at least \$500.

My mixed blooded cows and heifers, $\frac{1}{2}$, $\frac{3}{4}$, and 7-8, 10 in number, cost me \$400, three years since—they and their produce at the sale brought \$1,243, and I had previously sold some of them and their calves for \$404. I have omitted to count the services of Don Juan, worth at least \$350.

I may add that my stock generally did not bring the prices I anticipated, owing most probably to

there being a large sale two days after mine, on the farm of one of the most celebrated and oldest raisers of Durham Cattle in the state. Permit me to close these remarks by asking the opponents of the Short Horn Durhams, if they know of any kind of stock that will afford a larger profit in the same time, with the like capital laid out, and with as little trouble and risk?

Very respectfully,

M. SMITH.

A LIST OF SALES

Of thorough bred and mixed blood Cattle, made by the subscriber on the 8th Sep. 1838.

Don Juan, 2 years old bull, weight 1845 lbs., to Francis S. Read, of Mercer co., Ky.	\$1075
Britania, 5 years old, John Brand, Lexington,	620
Victoria, Britania's calf, 9 weeks old; same,	360
Volante and calf, 3 years old, same,	690
Cleopatra, 2 years old, 7-8, Nat. Pettit, Fayette,	112
Pontiana, 4 years old, 7-8, H. T. Duncan,	110
Sylph and calf, 4 years old, 7-8, C. C. Morgan,	150
Andromache, 5 years old, 7-8, N. Pettit,	105
Her calf, 6 months old, 15-16, same,	60
Chester, 7 years old, H. Atchison,	65
Her calf, 5 months old, $\frac{3}{4}$, A. Warner,	50
Margaret, 4 years old, $\frac{3}{4}$, W. M. Brand,	79
Mary, 4 years old, $\frac{3}{4}$, B. Scott,	75
Her calf, 6 months old, 7-8, A. Warner,	60
Diamond, bull, 5 months old, 7-8, Mr. Talbot,	50
Jeanette and calf, years old, $\frac{1}{2}$, A. Atchison,	42
Reliance, 2 years old, $\frac{3}{4}$, A. Warner,	77
Rowena, 2 years old, $\frac{3}{4}$, N. Pettit,	60
Julia, 2 years old, $\frac{3}{4}$, same,	42
Two yearling heifers, $\frac{1}{2}$ and $\frac{3}{4}$, same,	66
Rowena, lame, $\frac{3}{4}$, H. Atchison,	50

Total, \$3,988

M. SMITH.

CATALOGUE

Of the Blooded Stock sold at the sale of Major SAMUEL SMITH, deceased, Fayette co., Ky. September 11, 1838.

No. 1. Nancy Dawson, Spencer Cooper and Gratz,	\$405
2. Cleopatra, C. C. Morgan,	1230
3. Ellen, R. T. Dillard and C. R. Ferguson,	1235
4. Letitia, Benjamin Scott,	510
5. Overton, W. D. Young,	610
6. Oliver Keen, 5 months old, W. S. Hume,	1000
7. Young Comet, 2 months old, W. M. Rose,	265
8. Crittenden, 12 months old, G. W. Clark,	625
9. Scioto, R. T. Dillard and C. R. Ferguson,	500
10. Daisy, (barren,) J. Matson and J. Sphears,	210
11. Gaudy, Thomas Hughes,	305

12. Creeping Cate, C. C. Morgan,	250
13. Miss Matchless, 2d, W. M. Ross,	310
14. Young George, John Overton,	150
15. Adelaide, R. T. Dillard & C. R. Ferguson,	1375
16. Beauty of Warfdale, F. S. Read,	755
17. Adeline, J. Kennard and Thos. Wallis,	1030
18. Young Adelaide, R. P. Kenny,	440
19. Mary Ann and Calf, 10 days old, R. G. Jackson and Benj. P. Gray,	2100
20. Prudence, E. S. Washington,	755
21. Jewess, (barren,) J. Matson and J. Sphears,	276
22. Flower, $\frac{3}{4}$ cow, Joseph Hern,	89
23. Derry, $\frac{1}{2}$ cow, S. Collins,	50
24. Olive, 7-8 cow, John Brennan,	192 50
25. Mary Brand and Calf, C. R. Ferguson,	150
26. Lady Jackson, $\frac{3}{4}$, C. C. Morgan,	65
27. Lucinda, $\frac{3}{4}$, C. R. Ferguson,	80
28. Matilda, 15-16, (supposed barren,) R. Lighter,	48
29. Miss Susan, 7-8, N. Dudley,	50
30. Mary Jane, 7-8, Isaac Morton,	135
31. Margaret, 15-16, yearling, W. Warner,	315
32. Lucy Ann, 15-16, yearling, R. Lighter,	250
33. Mary Eliza, $\frac{3}{4}$, yearling, A. Warner,	42
34. Emperor, 15-16, bull calf, 5 months old, Mr. Bennet,	200
35. Howard, 7-8, 5 months old, W. Warner,	165
36. Miss Fry, 7-8, heifer, W. Lighter,	155
37. Laura, $\frac{3}{4}$, heifer, C. W. Clark,	50
38. Zarilda, $\frac{3}{4}$, heifer, Isaac Morton,	80
39. Maria, 7-8, do. do. do.	130

W. T. CALMES,

Acting Executor of S. Smith, dec'd.

THE TALIPOT TREE.

The talipot tree is one of the most splendid productions of Ceylon. The body of the tree is sixty or seventy feet in height, and straight as a ship's mast, without a limb or leaf until you reach the top, where is an immense tuft of fan leaves, so large when spread, that each one may cover ten or twelve men. The stock or stem, as there are no limbs, clasps the body of the tree, and inclines outwards, so that the long leaf bends over a graceful curve. This vast crown of evergreen, surrounding a shaft, is itself very grand; but there is something still more grand. When the tree is about fifty years old it blossoms. In the centre of its crown rises a cone seventeen feet in height, which gradually swells and enlarges, until at length it bursts with a vast conical flower, fifteen or twenty feet in height, and ten or twelve in breadth, stands exposed in almost incredible magnificence. It is yellow, and formed of numberless small blossoms, so arranged on a giant stem, and innumerable branches or tassels, as to appear over the elevated tuft of leaves, as a gorgeous diadem on the head of the queen of the forest. The tree blossoms but once and then dies.

CHINESE MULBERRY TREES.

American Silk Agency, No. 5, Bank street, Philadelphia.

The subscriber having opened a permanent Agency for the purchase and sale of all articles connected with the culture and manufacture of Silk in the United States, offers for sale all the different varieties of MULBERRY TREES, suitable for raising the SILK WORM; viz: *Morus Multicaulis Alpines, Brussa Multicaulis Seedlings, Morus Expansa, Multicaulis Cuttings, Improved Italian Trees, &c.* Also, Cuttings from *Norton's Virginia Seedlings*, and *Cunningham's Prince Edward Grape Vines*. These vines produce an abundant crop of fruit, warranted not to rot or mildew and are fine for the table, and capable of yielding the finest wines.

S. C. CLEVELAND, Agent.

Those who may wish to enter into this profitable branch of national industry, will do well to call at the Agency, and see that they are well instructed in the value of the trees they purchase.

N. B. The particular attention of those engaged in the culture and manufacture of American Silk, whether of trees, Eggs, Cocoons, reeled or manufactured, is called to this agency. The Agent will give every attention to Sales, and prompt remittance of proceeds of any article sent to him. Those who may wish to purchase and enter in this valuable branch of home industry, can obtain from the agent every information, and also such articles as they may want without fear of deception.

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THE MARYLAND SILKCOMPANY OF BALTIMORE—OFFER FOR SALE,



50,000 *Morus Multicaulis* or Chinese Mulberry Trees
10,000 Alpine Mulberry Trees selected with care
5,000 Canton do do
5,000 Rose of Lombardy do
10,000 other varieties
Apply to

LUTHER J. COX,
President, Commerce st. Baltimore.

Oct. 9.

3t.

[The Silk Culturist, Hartford, Conn., the Silk Grower, Burlington, N. J., the Farmers' Register, Petersburg, Va. and the Farmer's Cabinet, Philadelphia, will insert the above three times, and forward their respective accounts to this office for collection.]

DURHAM STOCK FOR SALE.

No. 1. *Matilda*, 3 years old, a dark mahogany red or Devon color; she is out of a half Devon cow, by a full bred Durham bull, and now in calf by one. He price is \$60.

No. 2. *Beauty*, a handsome roan, 4 years old, fresh in milk, possesses the fine points of the Durham; she is half Durham, and her price \$75.

No. 3. *Darby*, a red and white cow, 4 years old, and half Durham—her price is \$60.

No. 4. *Rachel*, a dark roan, and most beautiful creature; she is 2 years old; out of No. 2, and by a full bred Durham bull—price \$50.

No. 5. *Sally*, a strawberry roan, 3 years old, half Durham, in calf by a full bred Durham bull—her price is \$60.

No. 6. *Blossom*, a white cow with strawberry roan neck, 3 years old, and in calf by a full bred Durham bull—she is half Durham—price \$60.

No. 7. *Rose*, a brindle and white cow, 5 years old, half Durham, in calf by a full bred Durham bull—price \$60.

No. 8. *Tincy*, a reddish roan cow, 4 years old, in calf by a full bred Durham bull—price \$60.

No. 9. *Haunch*, a red and white pied heifer, 2 years old, in calf by a full bred Durham bull—price \$50.

No. 10. *Snout*, a white heifer, with red neck and ears, 2 years old, in calf by a full bred Durham bull—price \$50.

No. 11. *Pink*, a whitish roan heifer, 2 years old, in calf by a full bred Durham bull—price \$50.

No. 12. *Cherry*, a half Devon cow, 7 years old, a fine milker, in calf by a full bred Durham bull—price \$60.

No. 13. A beautiful cow calf, 5 months old, out of No. 12, by a full bred Durham bull—price \$20.

The above cattle are offered for sale by the subscriber, at the above reduced prices—terms, cash on delivery.—Applications made by letter to be post paid.

EDWARD P. ROBERTS,
Baltimore, Md.

oc 9 3t

Printing, executed at the Farmer & Gardener office, at short notice.

CLAIRMOUNT NURSERY NEAR BALTIMORE.



The subscriber offers for sale an extensive stock of FRUIT AND ORNAMENTAL TREES, ROSES and SHRUB PLANTS.—Also, SHRUB FRUIT PLANTS, such as Gooseberry, Raspberry, Grape, Currant and Quince, the former of which are of the latest importation, and all of the very finest English varieties.

The Apple, Peach, Pear and Plum, Cherry, Nectarine and Apricot Trees are all budded or grafted with the most choice varieties, mostly taken from bearing trees from his Experimental Orchard, are thrifty and mostly of good sizes for transplanting, especially the ORNAMENTAL TREES, which are from 8 to 15 feet high, excepting the Evergreens, which are best transplanted while small; of these he has a very extensive assortment. Also Dwarf Box, &c.

To afford some idea of the extent of his stock of Nursery articles on hand and ready for delivery as soon as the season arrives, he would say—PEACH TREES 20,000; APPLE TREES 10,000; CHINESE ATLANTHUS or TREE OF HEAVEN, LINDEN, ABEAL or SILVER LEAF POPLAR, BALSAM FIRS, and other varieties of ORNAMENTAL TREES, 5,000. Also, a half acre of most beautiful DOUBLE DAHLIAS, now beginning to bloom, and many other articles in his line.

For further particulars please see printed catalogues as to qualities and prices, to be had gratis of the subscriber, or at

ROBERT SINCLAIR Jr. & CO'S.

Agricultural and Seed Store,
Light-street, 3 doors from Pratt.

All orders executed with the greatest care and despatch. Persons disposed to purchase are invited to view the above stock, particularly the beauty and luxuriance of the aforesaid Mulberry, and splendor of the Double Dahlia, as well as the beautiful appearance of all the other Nursery articles.

ROBERT SINCLAIR.

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A HALF DURHAM COW FOR SALE.

The subscriber has for sale a beautiful fashionable roan half Durham Cow. She is fresh in milk and only 4 years old. Her price is \$75. Applications, post-paid, to be made to

ED. P. ROBERTS.

Who has also for sale several full bred Devons, males and females.

oc 2 4t

SEED WHEAT & RYE.

275 bushels white chaff bearded wheat

200 do red do do

250 do Italian and Tuscany spring do

All the above of superior quality, and selected particularly for seed. o 2

R. SINCLAIR, Jr. & CO.

SPLENDID BLOODED STOCK FOR SALE.

The proprietor of Covington farm will dispose of the following fine bulls on reasonable terms, viz.

One bull two and a half years old.

One do. six months old.

of the improved Durham short horn breed; the dam of the first was got by the celebrated bull Bolivar; for size, form and beauty they are not surpassed by any animal in the state.

Three Devon Bulls, one of which is seven years old next spring, and the largest Devon in the State. The Devons are from the stock of the late Wm. Patterson, and of undoubted purity.

Two half Devon bulls.

Two bulls half improved Durham short horn, and half Devon.

One splendid bull, a cross of the Bakewell, Alderney and Devon.

One bull, half Alderney and half Holstein.

These fine animals may be seen at Covington farm, near Petersburg, Frederick county, Md. on application to James L. Hawkins, Baltimore, or to

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FREDERICK EBERT, Manager.

A DURHAM BULL.

For sale, a superior Bull—he is of fine size and unexceptionable pedigree, which will be given next week—he comes from a strain of deep milkers, and is himself the sire of several fine animals. Price \$500. je 26 3

ROBERT SINCLAIR, Jr. & CO.

MANUFACTURERS & SEEDSMEN,

Light street, near Pratt street wharf, offer for sale,

An extensive assortment of Agricultural and horticultural Implements and Seeds, comprising all that are required to stock the most extensive plantation. Particular attention is directed towards the various departments, where the most competent workmen are employed, and durable materials used.

The assortment of Ploughs is large and various, among which are the Double mould board, Sub-soil, Self-Sharp-ening, Improved Davis, &c. &c.

Wheat Fans—Com. Dutch, Crank Shake and Watkins' Patent.

Corn Shellers—for manual and horse power, warranted to shell 2a700 bushels of Corn per day.

Corn and Cob Crushers—for breaking the cob in suitable size for feeding stock. Stock raisers will find their interest promoted by using this machine by a saving of full 30 per cent.

Cylindrical Straw Cutters—Of these there are several sizes. The late improvements made have rendered them the most perfect and effective straw cutter in this country.

Cultivators, for cultivating corn, tobacco, &c.

Drill and Sowing Machines, for drilling vegetable and grass seeds.

Vegetable Cutters, for slicing Turnips, mangel wortzle, pumpkins, &c.

Harrows—Expanding, com. square and diamond shape. Common Dutch Straw Cutters.

Patent Seeding Plough, made with 2 or 3 mould boards, which are formed as practice and science dictates to be the most perfect mode. The mould and landboard of these ploughs present two edges or sides, which can be reversed when the first course wears out.

Garden Seeds of every variety.

Field Seeds—English and Italian Ray Grass, Trefoil, Burnet, St. Foin, Lucerne, white and red Clover; green and blue Grass; early Potatoes; Gama Grass Roots; Baden and Mercer Corn; Dutton and early white Flint; several sorts garden corn; Italian and Tuscany Spring wheat; Timothy, herds and orchard Grass; Millet, &c.

Trees and Plants supplied at the shortest notice, from the Clairmont Nurseries near this city.

Wanted, prime lots Seed Grain and Grass Seeds.

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A BOAR AND SOW FOR SALE.

The subscriber is authorised to sell a boar and sow, half Berkshire; the boar is large of his age, being 18 months old, the sow 12 months old, and in pig by the boar; they are both fine animals, and will be sold for \$25. Apply to

oc 2 4t

ED. P. ROBERTS.

\$10 REWARD.

Strayed or stolen from the subscriber on the 26th of May last, one cow and two heifers. The cow is a large fine looking pale red cow, with short horns inclining inwards, one of which is rather shorter than the other; she has a restless look out of her eyes.

The largest of the heifers was 27 months old on the first of the present month, is slender built, of blood red or mahogany color, and resembles very much the Devon breed.

The other heifer was 18 months old on the 10th Sept. is a pale red buffalo, rather chunkily built.

Whoever returns the said cattle to the subscriber at his residence, 2 miles from this city, on the Philadelphia road adjoining the first turnpike gate, shall receive the above reward, or \$5 for the cow and \$2½ a head for the heifers.

Any person who may know where said cattle are, who will give such information as may lead to their recovery by the subscriber, shall receive half the reward, or a proportionate sum for either of them. E. P. ROBERTS.

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IMPROVED DURHAM SHORT-HORNS.

Early in October next, Mr. Whittaker's 2d sale of pure improved Short Horns, will be held at Powelton, near Philadelphia. Due notice will be given of the day of sale, when pedigrees in detail will be furnished.

The subscriber is authorized by Col. Powel to state that all the best cattle which he has at any time imported, and the improved Short-Horns, which he considered the best in England, were either in Mr. Whittaker's possession, or had been derived from his fold. In this sale, Col. Powel has not the slightest interest.

C. J. WOLBERT, Auctioneer.

aug 28

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BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every MONDAY

	PER	FROM	TO
BEANS, white field,.....	bushel.	1 25	
CATTLE, on the hoof,.....	100lbs	6 50	7 50
CORN, yellow.....	bushel	97	
White.....	"	94	
COTTON, Virginia,.....	pound	9	11
North Carolina,.....	"	9 1/2	11
Upland,.....	"	9 1/2	11
Louisiana — Alabama.....	"	11 1/2	12
FEATHERS,.....	pound.	45	50
FLAXSEED,.....	bushel.	1 12	
FLOUR & MEAL—Best wh. wh't fam.	barrel.	10 00	10 50
Do. do. baker's.....	"	—	—
SuperHow. st. from stores	"	7 87	8 00
“ wagon price,.....	"	7 75	
City Mills, super.....	"	8 50	
“ extra.....	"	8 00	
Susquehanna,.....	"	—	
Rye,.....	"	—	
Kiln-dried Meal, in hhds.	hhd.	19 00	
do. in bbls.	bbl.	4 00	
GRASS SEEDS, wholes. red Clover,	bushel.	—	
Kentucky blue.....	"	2 50	3 00
Timothy (herds of the north)	"	2 25	2 50
Orchard,.....	"	2 00	2 50
Tall meadow Oat,.....	"	—	3 00
Herds, or red top,.....	"	90	1 00
HAY, in bulk,.....	ton.	12 00	16 00
HEMP, country, dew rotted,.....	pound.	6	7
“ water rotted,.....	"	7	
HOGS, on the hoof,.....	100lb.	7 00	7 50
Slaughtered,.....	"	—	
HOPS—first sort,.....	pound.	9	
second,.....	"	7	
refuse,.....	"	5	
LIME,.....	bushel.	32	33
MUSTARD SEED, Domestic, —; blk.	"	3 50	4 00
OATS,.....	"	37	38
PEAS, red eye,.....	bushel.	—	1 12
Black eye,.....	"	1 00	1 12
Lady,.....	"	—	
PLASTER PARIS, in the stone, cargo,	ton.	4 00	
Ground,.....	barrel.	1 50	
PALMA CHRISTA BEAN,.....	bushel.	—	
RAGS,.....	pound.	3	4
RYE,.....	bushel.	90	95
Susquehanna,.....	"	—	none
TOBACCO, crop, common,.....	100lbs	4 00	4 50
“ brown and red,.....	"	4 00	6 00
“ fine red,.....	"	8 00	10 00
“ wrappery, suitable	"	—	
for segars,.....	"	10 00	20 00
“ yellow and red,.....	"	8 00	10 00
“ good yellow,.....	"	8 00	12 00
“ fine yellow,.....	"	12 00	16 00
Seconds, as in quality,.....	"	6 00	
“ ground leaf,.....	"	5 00	8 00
Virginia,.....	"	4 50	6 00
Rappahannock,.....	"	—	
Kentucky,.....	"	5 00	8 00
WHEAT, white,.....	bushel.	1 65	1 80
Red, best.....	"	1 65	1 70
Maryland.....	"	1 60	1 65
WHISKEY, 1st pf. in bbls.....	gallon.	46	47
“ in hhds.....	"	45	
“ wagon price,.....	"	—	
WAGON FREIGHTS, to Pittsburgh,.....	100lbs	2 75	
To Wheeling,.....	"	3 00	
Wool, Prime & Saxon Fleeces,...	pound.	50 to 55	
Full Merino,.....	"	45 50	
Three fourths Merino,.....	"	40 45	
One half do.....	"	35 40	
Common & one fourth Meri.	"	35 40	
Pulled,.....	"	30 33	

DURHAM & DEVON BULL.

Forsale, a young bull, 18 months old. He was got by a full bred Durham bull of the strain of Col. Powel, out of a full bred Devon cow. His color is a strawberry roan showing his affinity to the blood of his sire. His pedigree will be warranted, and his price is \$75, cash on delivery.

EDWARD P. ROBERTS,
Editor Farmer & Gardener.

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,.....	barrel.	—	—
BACON, hams, new, Balt. cured....	pound.	16	17
Shoulders,..... do.....	"	14	15
Middlings,..... do.....	"	14	15
Assorted, country,.....	"	14	15
BUTTER, printed, in lbs. & half lbs.	"	31	—
Roll,.....	"	—	37 1/2
CIDER,.....	barrel.	—	—
CALVES, three to six weeks old....	each.	5 00	6 00
Cows, new milch,.....	"	25 00	40 00
Dry,.....	"	12 00	15 00
CORN MEAL, for family use,.....	100lbs.	1 75	—
CHOP RYE,.....	"	1 75	—
EGGS,.....	dozen.	12 1/2	—
FISH, Shad, No. 1, Susquehanna,	barrel.	9 75	10 00
No. 2,.....	"	9 50	—
Herrings, salted, No. 1,.....	"	5 25	4 62
Mackerel, No. 1, ———— No. 2	"	11 50	12 00
No. 3,.....	"	—	7 25
Cod, salted,.....	cwt.	3 25	3 37
LARD,.....	pound.	14 1/2	16

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

U. S. Bank,.....	par	VIRGINIA.
Branch at Baltimore,.....	do	Farmers Bank of Virgi. par
Other Branches,.....	do	Bank of Virginia,..... do
MARYLAND.		Branch at Fredericksburg, do
Banks in Baltimore,.....	par	Petersburg,..... do
Hagerstown,.....	do	Norfolk,..... do
Frederick,.....	do	Winchester,..... do
Westminster,.....	do	Lynchburg,..... do
Farmers' Bank of Mary'd, do		Danville,..... do
Do. payable at Easton,.....	do	Bank of Valley, Winch. par
Salisbury,..... 1 per ct. dis.		Branch at Romney,.... par
Cumberland,.....	par	Do. Charlestown,.... par
Millington,.....	do	Do. Leesburg,..... par
DISTRICT.		Wheeling Banks,.... 2 1/2
Washington,.....		Ohio Banks, generally 3
Georgetown,.....	Banks, 1/4 p.c.	New Jersey Banks gen. 3
Alexandria,.....		New York City,..... par
PENNSYLVANIA.		New York State,.... do 1/2
Philadelphia,.....	par	Massachusetts,..... 1 1/2
Chambersburg,.....	1/2	Connecticut,..... 1 1/2
Gettysburg.....	do	New Hampshire,.... 1 1/2
Pittsburg,.....	2 1/2	Maine,..... 1 1/2
York,.....	1/2	Rhode Island,.... 1 1/2
Other Pennsylvania Bks. 2		North Carolina,.... 3 1/2
Delaware [under \$5].... 4		South Carolina,.... 4 1/2
Do. [over 5].....	1 1/2	Georgia,..... 5 1/2
Michigan Banks,.....	10	New Orleans,..... 7 1/2
Canadian do.....	10	

MULBERRY TREES.

200,000 genuine Mulberry Trees, and as many more as may be wanted, of the most improved kinds—

Consisting of the best selected varieties now in use, for cultivation, feeding worms, and making silk;—being acclimated to this country, and adapted to either warm or cold climates, affording a rare opportunity for Companies or individuals to be supplied, from the most extensive collection of mulberry trees ever seen in any village within the United States.

Autumn is decidedly the best time for removal, and orders left with

Messrs. I. B. Colt, Sec'y of the Connecticut Silk Manufacturing Company, Hartford; Alonzo Wakeman, at the office of the American Institute, No. 187 Broadway, N. Y.; Thomas Lloyd, Jr. No. 236 Filbert street, Philadelphia, Pa.; Luther I. Cox, Baltimore, Md.; B. Snider & Co. Savannah, Ga.; Bliss Jenkins & Co. Mobile, Al.; James Lyman, St. Louis, Mo.; Case & Judd, Columbus, O.; G. Harwood, Rochester, N. Y.; and the publishers of this advertisement, or with the subscriber, in Northampton, Mass.

Orders left with the above gentlemen will be promptly attended to, and each will be furnished with samples of the foliage.

Several valuable farms may be had with or without Mulberry plantations. Apply at the office of

D. STEBBINS.

Northampton, Aug. 22, 1838.

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TO THE PUBLIC.

Try the New Agricultural Establishment in

Grant-street, next door to Dinsmore and Kyle.

Every article warranted to be first rate. The subscribers, grateful for past favors, take this early opportunity of returning their thanks to their customers and the public in general, and beg leave to inform them that they are now provided with a very extensive stock of newly manufactured AGRICULTURAL IMPLEMENTS, suitable to meet the call of Farmers, Gardeners, Merchants, Captains of vessels, and others, viz: 1000 Ploughs, assorted sizes, from \$4 to \$15 each, comprising of the old common Bar Shear, Winand's Self Sharpener; Woods & Freeborn's patent, all sizes, "Davis," "Sinclair & Moore's" improved Hill Side Ploughs, highly esteemed for turning the furrow down hill, with wrought or cast shears; Wheat Fans, of various sizes and patterns, from \$15 to \$50 each, warranted to separate the garlic from the wheat; Corn Shollers, from \$12 to \$20; Cutting Boxes, from \$7 to \$50 each; Corn and Tobacco Cultivators, large and small; Expanding do., Wheat Cradles warranted to have fingers of the natural growth, and Grass Scythes, &c. &c.; Castings, of all descriptions and patterns, by the lb. or ton, to suit customers, allowing a liberal discount to merchants buying to sell again—all of which will be furnished on the most pleasing terms and every article warranted to be of the best quality, in proportion to the cost price. All orders by mail or otherwise shall be duly attended to with the greatest despatch.

We would particularly call the attention of Country Merchants and others, wishing to purchase agricultural implements to sell again, to the fact, that we will furnish them with articles on better terms than they can be supplied at any other establishment in the city. Our assortment is complete and as varied as that of the most extensive concern in Baltimore.

We have also connected in its operations with the above branch of business a complete assortment of FIELD AND GARDEN SEEDS, kept by Thomas Denny—Also Garden and Farm Tools, of various sorts and of the choicest collection, which will enable our customers to have filled entire all orders in the Agricultural and Seed Departments. mh 26 JOHN T. DURDING & Co.

FARMERS' REPOSITORY

OF AGRICULTURAL IMPLEMENTS AND EASTMAN'S CYLINDRICAL STRAW CUTTERS IMPROVED.

THE Subscriber informs the public that he has secured by letters patent his late and very important improvements on his Cylindrical Straw Cutter, by which improvements they are made more durable and easier kept in order. All the machinery being secured to an iron frame the shrinkage, wear and decay of wood is avoided. The feeding part of his improved machine is upon an entire different principle from the former machine; far more durable, requiring neither skill or care to keep it in order. These machines are so constructed as to make the freight on them less than half what it cost to ship the former or wood machines, an important desideratum to purchasers living at a distance; and I now offer it to the public upon the credit of my establishment as the most perfect machine in existence for the same purpose. They are also adapted to cutting rags for paper making, and for cutting tobacco as manufactured by Tobaccoists, &c.

I also keep these machines on hand made as heretofore with my new feeding machinery attached to them; and also a general assortment of Agricultural Implements, as usual. Elliott's Horizontal Wheat Fans, and Fox & Bolland's Threshing Machines are both superior articles.

My stock of Ploughs on hand are not equalled in this city either for quality, quantity, or variety. I have a large assortment of Plough Castings at retail or by the ton, and having an Iron Foundry attached to my establishment can furnish any kind of Plough or Machine Castings on reasonable terms and at a short notice.

All repairs done with punctuality and neatness. On hand, a few Patent Lime Spreaders, Horse Powers, &c. &c.

Also just received, a fresh supply of Landreth's superior Garden Seeds. In store, superior Timothy and Orchard Grass Seed and Seed Oats. All implements in the agricultural line will be furnished by the subscriber, as good and on as reasonable terms as can be had in this city, with a liberal deduction to wholesale purchasers. Likewise will receive orders for Fruit Trees from Mr. S. Reeves' Nursery, New Jersey.

JONATHAN S. EASTMAN,

Pratt street, Baltimore,
Between Charles & Hanover sts

feb 20

THE FARMER & GARDENER.

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, E. P. ROBERTS AND SAMUEL SANDS—EDITED BY E. P. ROBERTS.

No. 25.

BALTIMORE, MD. OCT. 16, 1838.

Vol. V.

— This publication is the successor of the late **AMERICAN FARMER** and is published at the office, at the N. W. corner of Baltimore and North streets, over the Patriot office, at two DOLLARS AND FIFTY CENTS per annum, if paid within one month from the time of subscribing, or \$3 if after that time. All letters to be post paid.

BALTIMORE: TUESDAY, OCT. 16, 1838.

Sketches of the Upper Wabash Valley.—We have been politely favored by the Hon. Henry L. Ellsworth, with a copy of the above work from the pen of Henry William Ellsworth, Esq. It is from the press of Messrs. Blair & Rives, Washington, is printed on a beautiful white paper of fine texture, with a clear and bold type; and it is but doing sheer justice to say, that the mechanical execution of the work is excellently well done. As for the contents of its pages, we will at present barely observe, that they are replete with information with regard to the interesting portion of our country of which they treat, that cannot fail to be of service to every one who wishes to be informed of those countless resources, which so abound in the fertile valley, which has been so graphically sketched by Mr. Ellsworth.

The Delaware Register.—The October number of this unpretending Magazine has been received, and we are gratified to find that it is in excellent keeping with the preceding numbers. Its matter is as various as instructive, and without affecting to be learned, the author is pursuing a plan in conducting it eminently calculated to improve the minds of his readers; and we are sure if its being a work of solid merit be any commendation to public favor, the Delaware Register must become a decided favorite with every intelligent reader. Its articles under the head of Annals of Delaware; its biographical sketches of the great men of that high-souled little State, as well as its agricultural and miscellaneous papers, are all evincive of the good taste and discriminating judgment of its enlightened editor.

EUROPEAN CROPS AND MARKETS.

In the present state of agricultural affairs in Europe and this country, we deem it our duty to keep our readers advised of the condition of the

crops as well as the prices in the markets of the former, as whatever affects the value of agricultural products there has a like effect here. With this view we shall proceed to give a condensed view of the agricultural news received by the Steam-ship Royal William, at New York. She brings intelligence from London up to the 19th September, and from Liverpool to the 20th.

GRAIN MARKETS AND CROPS.

The *London Spectator* of the 16th ult. says that scarcity of food was experienced by the bulk of the English people; that the average price of wheat on the preceding day had reached 73s. and a fraction a quarter; that foreign corn (wheat) was offered at duty free, the duty paid being only a shilling a quarter. The whole stock of foreign grain in bond was to be taken for consumption, and the British ports are now open for foreign grain.

The demand good and an advance in price of a shilling a quarter.

During the week preceding the 18th September there had been no rain, and the weather in the vicinity of Liverpool, though sometimes too cold and deficient in sunshine for unripe grain, has been on the whole favorable to harvesting, which was then in active progress. The wheat crop it was believed would be seriously deficient in quantity and defective in quality. The imports of wheat had been trivial.

The London and Newcastle journals represent the weather favorable to the harvest, and the grain as full, round, and of good weight; indeed as good as any of former years. Similar accounts are given by the *Leeds, Carlisle, Bristol, Doncaster* and *Manchester* papers.

The *Edinburg Advertiser* represents the weather as having been unsettled, and as having for part of a day, by heavy showers, interrupted the harvest which had, owing to a favorable change in the weather, been resumed.

In Ireland, from the Dublin and Limerick papers, we learn that the weather had been propitious to the labors of the harvest, and it is anticipated that a week's continuance of such weather would enable the farmers to get in their crops in good condition.

The Irish new wheat brought to the Liverpool

market, was inferior and very damp—the oats good. The arrivals of foreign wheat at Liverpool was large; of all of which, as well as the previous stocks in bond, consisting of 160,000 quarters of wheat, and 62,000 barrels of flour, are considered as free. The wheat trade had assumed a decidedly better tone, and buyers numerous. Dantzic and other mixed wheat brought from 9s. 9d. to 10s. 6d; Baltic red 9s. to 9s. 9d. a 10s. Odessa, hard and soft, 8s. 6d. to 9s. Irish old red 8s. 9d. to 9s. 3d; new 8s. 6d. to 9s. 6d. per 70 lbs. Sales in barrels—Baltic, sweet, 33s. to 38s. U. S. sour 32s. to 36s.

The harvesting of wheat in the southern counties of England had been good, while in the northern counties great damage had been done, and but slight hopes entertained of getting in the harvest in tolerable condition.

In Scotland the wet and storms had proved disastrous to the grain crops.

The effect of the news on the New York market has been to raise the price of flour—it is firm there at \$9 per barrel.

The crops in every part of the state of Louisiana, we learn from the Thibadeaux Intelligencer of the 21st ult. was in the most flourishing condition at that time, and we trust will so continue until the planters of that state shall have gathered them into their garners.

DANGER FROM THE GLANDERS.

The following article copied from a London paper, will serve to admonish our countrymen of the danger to be apprehended from permitting the virus of this disease to come in contact with any part of the human body susceptible of absorbing it, and as we trust may be the means of convincing them also of the necessity of destroying such horses as may be infected with the glanders, a disease ninety-nine times out of a hundred incurable.

HORRIBLE DEATH.

On Saturday week, an adjourned inquest was held at the Champion, Princes-street, Lisson Grove, on the body of John M'Lellan, whose death occurred under the following circumstances: The jury first proceeded to view the body of the unfortunate man, which presented a spectacle too horrible to describe, the face being en-

ing entirely eaten away, and the whole body being one mass of sores from top to toe. From the depositions, it appeared that the deceased was the driver of a cab and horse, the property of Mr. W. Johnson, a cab owner, at the west end of the town. On the evening of Friday week, deceased came home, and complained of having a cold. He took some gruel, and went to bed. On the following day, large lumps or swellings began to make their appearance under the jaw and on the nose, which, as well as the eyes, emitted a great deal of running. The eyes gradually became worse, and full of holes, and the nose and jaw broke out into dreadful sores. Medical aid was called in, but the gentleman who attended was unable to tell the nature of the disease. On Wednesday week deceased was conveyed in a cab to Sir Astley Cooper, who examined him, and pronounced it to be the glanders, caught from a horse. The deceased's medical attendant subsequently fell in with his opinion; but all remedies were found of no avail. The unfortunate man gradually became worse, and entirely insensible. In the space of two days his nose fell from his face, and his eyes became like a colander, both emitting a thick mucous running. He, however, about a quarter of an hour before his death, which took place on Thursday evening, recovered his senses, and stated that he had got his death by wiping the horse which was glandered with his pocket handkerchief, and then incautiously using the same to wipe his own nose. He expired in the most excruciating agony. The jury returned a verdict "That the deceased died from glanders accidentally caught from a horse, of which he was the driver."—*London paper.*

PHILADELPHIA AGRICULTURAL FAIR.

We take pleasure in translating into our journal the following notice of a fair to be held near Philadelphia, under the auspices of the *Philadelphia Society for promoting agriculture*, in the latter end of the present month; and believing that such exhibitions are eminently conducive to the interests of agriculturists, we sincerely hope that this effort to revive "a custom so honoured in the observance," will be met in the proper spirit by every man in that great State, who feels a proper regard for the prosperity and welfare of his country.

AGRICULTURAL SOCIETY.

At an adjourned meeting of the Philadelphia Society for promoting Agriculture, held at their Hall, on the 26th ult. Dr. J. Mease, Vice President in the chair, the report of the committee on an Agricultural Exhibition and Sale was approved and adopted:

The Committee report that it be held at Elliot's Tavern on the Lancaster Road, about a mile and a half from the permanent bridge, in the latter end of October.

The advantages of extensive stables and yards, together with the disposition of Mr. Elliott, to make such arrangements and additional preparations as may be required, induced the committee to make this selection.

It has been usual at Agricultural Exhibitions to

offer premiums for ploughing matches, but it is questionable whether such trials are of practical utility. The great strength and speed that is brought into competition for half an hour's labor at the plough could not be kept up during the day, and the plough that would turn its furrow well at the usual speed of $2\frac{1}{2}$ miles per hour, would at the rate of 4 miles throw its furrow twice over. It follows then that that plough whose mould-board is so completely worn that it would let the furrow fall back with usual ploughing, would, with such an increased impetus, turn its furrow well, and although good for nothing, for practical purposes, might on such an occasion bear away the premium.

But aware of the superior value of the plough, taking the lead of all other agricultural implements, the committee recommend testing the qualities of different ploughs, by procuring a suitable instrument for the purpose of ascertaining the comparative power of draft; this being ascertained, the most satisfactory results will follow.

The Philadelphia Society for promoting Agriculture, has been so recently reorganized that its finances are not yet in a state to offer attractive premiums, but it is believed that there is a sufficient inducement for the owners of fine stock or superior implements of husbandry, to come forward, as an award of the Society will be of permanent advantage to the successful competitors. A member of the Society, C. J. Wolbert, Esq. proposes on liberal terms, as Auctioneer, to conduct the sale at the fair.

The Committee recommend the following premiums to be awarded, viz:

For the best imported Bull, above one year old, \$10; for the second best do \$5.

For the best native Bull, above one year old, \$10; for the second best native do do \$5.

For the best native bull Calf, from four to twelve months old, \$5; for the second best do do \$3.

For the best imported Cow \$10; for the second best do \$5.

For the best native Cow \$10; for the second best do \$5.

For the best imported Heifer, above four months old, \$5; for the second best do \$3.

For the best native Heifer, above four months old, \$5; for the second best do \$3.

For the best Calf, under four months, \$5; for the second best do \$3.

For the best Calf, under four months, \$5; for the second best do \$3.

For the best Ox or Steer, fitted for slaughter, regard to be had to, and a particular statement to be given of the mode and expense of fattening, \$10; for the second best do \$5.

For the best pair of working Oxen four years old or more, \$10; for the second best do \$5.

For the best Stallion \$10: for the second best do \$5.

For the best brood Mare \$10; for the second best do \$5.

For the best Jack \$5; for the second best do \$3.

For the best Jenny \$5; for the second best do \$3.

For the best imported Ram \$5; for the second best do \$3.

For the four best Ewes \$8; for the four second best do \$4.

For the four best Lambs \$5; for the second best do \$3.

For the best Boar \$5; for the second best do \$3.

Any animals that shall not be superior of their kind, or worthy of distinction, shall not be entitled to premium. The judges shall be empowered to award a sum not exceeding \$50 in the aggregate, for such agricultural implements and household manufactures as shall be considered worthy of especial notice.

NOTE.—The term *native* is used to designate animals produced and bred in this country, whether from our own or imported stock.

It was resolved that a Committee of Arrangement be appointed, who shall make preparations for the reception of stock, &c., have entire control and superintendence of the exhibition, and in conjunction with the Auctioneer, make arrangements for, and conduct the sale. They shall, previous to the sale, announce the premiums awarded by the judges.

The Committee of Arrangements, appointed by the Chair, are—

Thomas Rotch, Philadelphia County.

Alger. S. Roberts, Philadelphia County.

James Thornton, Byberry.

R. A. Parrish, Philadelphia.

Nath. Richardson, Frankford.

Geo. W. Roberts, Montgomery County.

John Fox, Holmesburg.

Nicholas Biddle, Philadelphia.

Kenderton Smith, Philadelphia County.

ALGER. S. ROBERTS, *Assis. Secy.*
Sept. 28th, 1838.

The Committee of Arrangement, anxious that a display of animals, &c. creditable to this section of the country may be made, notwithstanding the short time afforded for preparation, earnestly solicit all those who may have any good stock to render their aid and support to the exhibition.

The accommodations for all descriptions of stock will be ample; no charge for stabling will be made, and the lowest possible rates for fodder. The Committee hope that all who have any implements or apparatus of particular excellence appertaining to Agriculture, will avail themselves of this occasion to make them known to farmers.

—Ample provision will be made for the reception and display of household manufactures, or any articles made or prepared in families.

Potatoes.—The Portland Courier says, "There has been quite a stir in our market for a week or two past, in the article of potatoes. The demand has been brisk and the supply most liberal. Some of our wharves have been daily thronged with cartloads from the country. They have been quick at forty and forty-five cents per bushel; and some have been sold as high as fifty cents. They have been purchased mostly to be shipped to the South. The "fever" has been checked a little, we understand, on account of a decline of price in the Southern market."

We hope our eastern friends will not forget that they can find a market for their surplus pota-

atoes, without "shipping them to the South." Potatoes bear a high price in our market—high enough we should think, to satisfy the reasonable desires of any farmer in Maine. In Massachusetts the crops are light, and the quality inferior. We have not had a good potato since our last winter's stock was exhausted.—*Boston paper.*

We trust the selfish advice of the Boston editor will not be followed, and we would have him recollect, that in the South and West his Eastern brethren find their best markets for their domestic manufactures and yankee notions generally.—*Ed. Far. & Gard.*

THE WHEAT MAGGOT.

Mr. Twynham, of Whitechurch, says, that he first observed the wheat maggot, which has this season committed such general havoc, in the year 1828, when it occasioned a deficiency of produce, in Hampshire, to the amount of one-fourth of the crop; that it has prevailed in a small degree during two or three subsequent years, but nothing in comparison with the numbers now apparent, the havoc appearing to exceed that of 1828, with this counteracting circumstance, that the ears of wheat this year are much better formed and thicker set, and would, but for this unfortunate casualty, have yielded much more abundantly than for many years past. This maggot is produced by a small fly, of a reddish yellow body, with fawn-coloured wings. The moment the stem of wheat is cracked by the bursting ear, and long before it is fairly out, swarms of these flies settle on it, and may be seen of an evening (at which time they are most busy) completely covering the exposed part, and introducing from their body a long tube, about the size of a fine hair, into the capsula, or, as commonly termed, the "chess" of the ears where the blossom of the wheat is forming; through this tube, I imagine, the eggs from which the maggot is produced are deposited—certain it is, that in about 10 days, from the time these flies are thus adhering to the ear, the maggots begin to show themselves. It will be observed, that one side of the ear is much more affected than the other, which is accounted for by its bursting the straw laterally, the other side being covered by the flag, until the first part has made its appearance several days; hence the part first exposed, and on which the fly immediately settles, being filled full of eggs, and consequently maggots, is most injured; for, as in the nut, these insects do not travel from one kernel to another, as a close inspection of the ear will prove, fine full-sized corns being found in the middle of the ear while others are destroyed above and below. By the time the whole ear is fairly through, which, in a season like the present, frequently takes a week to accomplish, the fly has done its worst, its eggs are exhausted, and hence the immunity of the one side from mischief.

CORRECTION OF SOUR LAND.

MR. EDITOR:—I will mention an incident, by way of exhibiting the importance to the farmer, of an acquaintance with the general principles of philosophy and chemistry. I am a farmer of the old school, and have more practice than learning, and more faith in economy than skill in invention. I

have a large piece of meadow, level and handsome, which might be thought capable of producing three tons to the acre,—and yet is so cold and sour, as we call it, that I hardly get one ton. I have manured it in the most lavish manner; but to very little purpose. It was too wet to produce any other crop, even potatoes; consequently there would be little use in breaking it up and seeding down anew. So I concluded to look upon my meadow as I would upon a cow with two teats, and be contented with my ton to the acre.—My oldest boy is what they call a scholar; so I sent him to college. The second year he came home in the spring, and heard me speak of my sour meadow. He examined it, and asked why I did not spread upon it a quantity of lime or plaster, and thus, by a chemical process, expel the acidity? "Go to college with your jargon!" said I—but the boy talked, till I for the first time in my life, resolved to try an experiment. And I tried it in this way; as soon as the grass began to start, I set apart about an acre of the poorest, for the "chemical process." Spreading thinly a quantity of Plaster of Paris, I waited to mark the result. The benefits derived from the process were soon too obvious not to be discovered; the grass looked fresh and thrifty, and could soon be distinguished from the rest of the field. When cut it was not only a better quality, but nearly a third more in amount, than the produce of any other acre in the whole field. I tried the same experiment on the remainder with the addition of a liberal and judicious application of manure—and the result was the same as with the acre. The boy solved the mystery, by saying that an acid and an alkali, when mingled together, produced a fermentation in which both were neutralized, and which was favorable to the decomposition of such as were not readily reduced by the common course of nature.

The case was a simple one—but it struck me as rather singular that my boy could study agriculture in college to better advantage than I had on the farm. I thereupon concluded that farming could profitably be made a study, and that chemistry and philosophy are two of its first and most essential branches.

AN OLD FARMER.

Farmers' Journal.

From the Practical Farmer.

CLEANING NEAT CATTLE.

The following we translated, and we would invite the attention of farmers to the subject. Our German Correspondent is the right kind of man. He gives his notions well confirmed by experience.—*Editor.*

XENIA, Ohio, June 14th, 1828.

MR. EDITOR:—Allow me through the "Farmer," to say a word to my fellow farmers on what seems to me, an important subject. In this country, you will seldom find a curry-comb and hand brush in the cow-stable; these are considered indispensable in the horse-stable; but I consider them indispensable in the cow-stable, as in the horse-stable. Why farmers do not curry and brush their cows, I know not, unless it be that they think cleanliness is not so necessary to the cow as to the horse.

But if we will, for a moment, consider the evils arising from this neglect, the importance of keep-

ing cows clean must strike every reflecting mind. It is well known that no animal, neither horse nor cow, can be healthy; unless the *insensible perspiration goes on regularly*, and this can never be going on if cows are kept in a dirty stable, and no pains taken to rub off carefully the dirt or matter which obstructs the vessels or pores of the skin.

Wherever cows are regularly curried and rubbed, they are invariably stronger, and in a healthy condition; not liable to *cutaneous* and other diseases; and from experience I know, they yield more milk, and that too of a better quality—a cleaner milk, richer cream and sweeter butter, necessarily follows.

I make it a practice to curry my cows once a day very carefully—I never suffer any dung to stick to their coats—it looks bad and injures the cows. This useful animal does not deserve such *dirty treatment*.—Give them litter sufficient, and remove the dung regularly, and this part is accomplished.

Many of our farmers seem to think that in order to have healthy and good cows, you need only feed them with a sufficiency of food; however, I am fully convinced from experience, that cows may be well supplied with food, still they will not be as profitable as they would be if kept perfectly clean, and free from all kind of dirt and matter obstructing perspiration, as above stated; besides this, if cows are kept perfectly clean, they will thrive upon a less quantity of food.

Cows are often subject to have swollen teats and udders, as well as other excrescences. These may be prevented if the parts be occasionally washed with warm water. The udder and teats should be carefully washed immediately before the cow is milked. It has been well said by *Lodon*: "Go to the cow stall—take with you cold water and a sponge, and wash each cow's udder clean before milking; douse the udder with cold water, winter and summer, as it braces and repels heat."

If you think the above worthy a place in the Farmer, I may then continue my remarks by saying something on the "*feeding of cows*," in my next letter—send me the Farmer regularly.

Yours,

DAVID HEYMACKER.

Extract from a letter received by the American Silk Grower, dated Fredericksburg, Va., Aug. 23.

"There is one part of the business which I do not think has been regarded with that attention which it ought to have been, viz: the curing of cocoons and killing the crysalis. Some have recommended steaming with alcohol, some with water, some baking in an oven, and others exposing them to the sun. Most of these methods I think have some objections, which I presume you are better aware of than I am. I think I have hit on one of the best plans that I have ever seen for curing large quantities; and one of the most economical. My plan is to have a small brick building, say twelve feet square and eight feet high, built as tight as convenient, with only one door and no windows, and have the rafters lathed and plastered over to prevent the escape of the heat. Have three pots on each side, leaving a passage through the centre of three and one-half feet. Let strips be nailed from each of the pots to the wall, one foot apart, similar to those fixed for the hurdles in a cocoonery. Then take strips of thin boards, say

half inch thick and two inches wide, and let them run the whole length of the building on top of the slats that join to the wall; put them about an inch apart. In this manner you will have a set of eight shelves on both sides of the room, making sixteen shelves four feet wide and twelve feet long, which will hold one or two hundred bushels of cocoons. Then, in the centre of the room, have a small sheet-iron stove that will hold half a bushel of charcoal, with a small pipe leading out at roof, and a ventilator going through the side of the building, near the bottom, so as to admit air to keep the coal burning. Let the ventilator be attached to the stove, so as not to let in any air except what goes directly into the stove. In this way, two hundred bushels of cocoons may be cured for twelve and a half cents, as one and one-half bushels of charcoal is sufficient. I have had one built in this manner, and have found it to answer the purpose. In this way there is no danger of burning the cocoons, and they will dry in a short time sufficiently to be barreled up and sent to every part of the world without damage.

"If you should, either of you, come to Virginia, I should like to have you call and see our establishment. I have a reel of my own invention that I think will prove to be a valuable one, and as simple and cheap as any that can be made. It is so constructed that one person can turn and keep ten tending to the threads, or it can be attached to machinery, and reel one or twenty skeins at once, just as is most convenient. The cost of one for reeling four skeins is five dollars. I have one and have tried it, and found it to answer a very good purpose."

W. H. DYER,
Agent for W. K. Smith.

From Chaptal's Agricultural Chymistry.

OF STIMULUS MANURES.

(CONCLUDED)

The greater part of those salts which are found in plants serve no purpose of nourishment; they are generally useful only as stimulating the organs and aiding digestion. Animals, as they enjoy the power of locomotion, can easily procure for themselves these stimulants, and whatever is needful for the exercise of their offices, and they take only such quantities and in such proportions as are suitable for them. But plants have no other medium than air and water, through which to receive their supplies; and this last transmits to them indiscriminately all which it can dissolve from the soil; whence it follows, that the best saline manures are those that can be only gradually dissolved.

This principle is applicable to all manures of whatever nature. There is, however, this difference in the effects of manures purely nutritive, and of the stimulating or saline manures; if the first be too abundant, the plant absorbs more nourishment than it can readily digest; and becomes affected by a kind of obesity; the texture of its organs is rendered soft, loose and spongy, and unable to give to their products the due degree of consistency; whilst on the contrary, if the stimulating manures be supplied too profusely, and especially if they be of kinds very soluble in water, the organs of the plants are dried and parched by the excess which they receive.

Those animal substances that are the most slowly decomposed, and which by their decom-

position always give rise to soluble products, are the best of all manures: of this, bones, horns, and wool, afford a sufficient proof. These substances possess the advantage of affording to plants their suitable aliments, almost always combined with a stimulant, such as ammonia, of which the too irritating action is moderated by its union with carbonic acid or with animal matter.

The ashes of turf and of pit coal produce wonderful effects upon grass lands. The first of these often contains gypsum, but frequently only silica, alumina, and oxide of iron. From ashes of pit coal I have obtained by analysis sulphate of lime.

The ashes produced, by the combustion of wood in our domestic fires, give rise to some very remarkable results. Without being leached, these ashes are much too active; but after having been deprived, by the action of water, of nearly all their salts, and employed in this state under the name of *buck-ashes*, they still produce great effect.

The action of the buck-ashes is most powerful upon moist lands and meadows, in which they not only facilitate the growth of useful plants, but if employed constantly for several years, they will free the soil from weeds. By the use of them, land constantly drenched with water may be freed from rushes, and prepared for yielding clover and other plants of good kinds. Wood ashes possess the double property of amending a wet and clayey soil, by dividing and drying it, and of promoting vegetation by the salts they contain.

THE SILK CULTURE.

The following items of intelligence will interest our readers:

SILK IN FLORIDA—The Tallahassee Floridian of the 15th inst. says:

"We have been presented with a specimen of sewing silk, raised and manufactured by a daughter of Major Lee, at his plantation on the Armonia. The sample consists of some two dozen skeins of a variety of colors, and in quality it is pronounced by competent judges equal to any brought to this place."

So great is the progress in the Northern and Eastern states of this most important branch of culture, that our friends the Messrs. Prince and Sons, of Flushing, L. I. on Thursday concluded the sale, to one company alone, amounting to sixty-five thousand dollars, for that invaluable food for the silk-worm, the *Morus Multicaulis* Mulberry tree, now grown in such perfection in their beautiful and extensive gardens.

Important Invention—There has lately been invented and is now in successful operation in the family of a respected member of the Society of Friends, in Rhode Island, a very simple machine by which the silk is by one operation reeled directly from the cocoons into sewing silk and silk twist of a very superior quality, and suitable for immediate use.

Raw silk is now produced in Connecticut at a cost of \$1.50 per pound, for which the producer receives a bounty from the state of \$1.50, and sells the silk readily at \$6 a pound, making a clear gain therefore of that sum for every pound, and the demand is greater than the supply.

Ought not our own State to foster also our citizens by offering similar encouragement to this most important culture. The silkworm flourishes in our country to a perfection and extent unknown,

we believe, in any other. As an instance we may cite that at the establishment of the Hon. Ambrose Spencer, near Albany, out of one lot of 40,000 silk worms hatched during the present season, but four were lost. By preserving the eggs in a cool place, a cellar, or well, or ice house, of a permanent temperature, they can be taken out any time and hatched whenever the worm is wanted.

N. Y. Star.

An extensive silk manufactory has been established on the Island of Hydra, in Greece. Two coal mines have been discovered in Greece—one in the province of Phthotis, the other in Peloponnesus.

Beet Sugar Manufactory.—The Newburyport (Mass.) Herald states that the Beet Sugar Company of Northampton are getting their buildings ready to operate on a large scale. They pay \$5 a ton for beets, and some of the farmers have raised 20 tons to the acre. The manufacture is carried on upon the German principle of drying, grinding, and making of the powder a strong decoction of syrup for crystallizing.

Big Hog.—The Cincinnati News gives an account of a large hog belonging to Mr. J. W. Bell, of Fayette county, Indiana. Dimensions as follows:

	Feet.	Inches.
Length from end of snout to end of tail,	8	9
Height,	4	2
Circumference of the arm,	1	2
Girth,	6	9
Knee,	0	11
Hoof,	0	10½
Throat,	4	0
Tail,	0	8
Length and breadth of ear,	14	by 9
Length of tusks,	0	8

Supposed weight 1,400 pounds,

The hog would have weighed, when fully fattened, it is supposed, 2000 pounds.

It is to be regretted that Mr. Bell had not registered the breed, age, and mode of feeding his hog.

Rhubarb is now brought to a high state of cultivation in England, and is much used for medical purposes. The root is not so close in the grain as the Turkey rhubarb, but it is as close and fine as that imported from the East Indies, though not quite so large.

CHINESE CORN, vs. AMERICAN—Grant Thorburn, of New York, has been experimenting on some corn, the seed of which he obtained from China. It strikes off into several branches, in appearance like a small tree, and produces an ear at the head of each branch. It grows from 8 to 10 feet high, produces an abundance of fodder, is a large white flint twelve-row corn, and ears from 10 to 14 inches long; some of the ears containing 660 grains. It was planted on the 10th of May, and had ears fit to boil on the 10th of July. The produce was much curtailed by the long drought, but some excellent American corn, planted on the same day, on the same field, and receiving the same quantity of manure and attention,

did not produce one half the quantity. The patch was examined by many respectable farmers, who pronounced it something new, and something superior. It is considered as much superior to our corn, as the *morus multicaulis* or Chinese mulberry is to that of the American tree.—*Sun*.

From the New York Farmer.

FATTENING HOGS WITH BOILED FOOD.

The remarks of Mr. Buel on the advantages of cooking food for fattening hogs, in the number of your Journal for December, certainly merits more attention than the subject will be likely to receive. So long since as in 1803 or '4, I had practical experience of this method of fattening what was then called a very mammoth of a hog, the net weight of the meat about six hundred and fifty pounds.

After having slain my stock of pork for a farm late in December, on riding by a neighbor's three or four miles from home, in the eastern part of Columbia county, I discovered a very large framed hog capering about the fields, his hair sleek, and concluded he had just escaped from the sty. On giving notice, the owner told me the story of that hog, which was that this had been the second attempt to fatten him, and that the hog "would only grow and not fatten," for which reason he had concluded to give him another wintering, and had just turned him out of the sty, having done so the fall before. On going to examine his other hogs I found that they had been supplied with plenty of corn in the ears, and water from a running brook. I tried to persuade the owner to adopt my plan with this hog, and feed him on corn meal boiled, but he soon stuck up his nose at the idea of "making hasty pudding for his hogs?" As my effort to persuade him was ineffectual, he finally made me an offer of his hog to try the plan myself, confident, as he said, that I would find it altogether unsuccessful.

To make the story short as possible. I bought the hog, for less than what the owner called the value of the corn he had eaten, put him into a warm sty, partitioned from a horse stable, and the next day commenced feeding him with hasty pudding, as my neighbor called it, made of corn meal and a mixture of boiled potatoes with now and then some pumpkins. This was done in a large kettle set in an arch, one boiling of which would last him a week. The hog soon began to fatten very fast, and to satisfy my neighbor who called to see him, I kept an account current of his food. He fattened astonishingly. On the last of June having kept him very cool over night, and without food for eighteen hours, I had him slaughtered before sunrise, and after hanging him up a little time, the meat colored by throwing on cold water, cut up and thrown into pickle with the hams and shoulders. On the 3d of July, I sent the meat to Albany by a careful man just as it was laid down in a half hogshead. He sold the meat readily and brought me back on the 4th of July, 640 old York shillings, for so many pounds of meat from this hog, sold out of the pickle. This enabled me to close my account current, the result of which was a clear profit of about one third of the sum he produced me. These facts were all perfectly notorious at the time—for at that time this was a monster of a "porker" as they say in Kentucky; and I think was published in some of the newspapers;

but I do not know that any one, except myself, has persevered in this plan of feeding, or that the experiment had any permanent effect on others. The farmers here, have considered the perfection of *pork making* to consist of good sound yellow corn and clear cold water, and so they will, for aught that I can discover, judging by past experience. Yet you may, if you please, publish this for possibly some may not be too wise to take a hint, if hint this long story may be called. For thirty years I have fattened all my pork on cooked food, and am confident that it has been done with one half of the quantity of corn that would have been required, if fed raw, on the cob. It is more than ten years since these facts were all communicated to Mr. Buel, the writer of the Albany county Agricultural Report, by

A SCIENTIFIC FARMER.

CORN.

The following is part of an epistle from Mr. Grant Thorburn to the editors of the New York Commercial Advertiser. We copy it for the benefit of our fancy "Corn Growers," doubting, however, whether much has been gained by these fancy seeds:—

Mr. Jefferson says, the man who makes three blades of grass grow where only one grew before, is more the friend of man than he who conquers kingdoms.* I think if Mr. J. had always preached such sound doctrine, he would have been the greatest philosopher of the age. Seeing then, that this proposition about the grass is a self-evident fact, what think you should be done to the man who makes three ears of corn grow where only one grew before? inasmuch as grass feeds the horse, and corn feeds the man. But to come to the point at once:—

Some three years ago, a merchant in New York, whilst emptying a box of tea, observed therein a few grains of corn. Concluding that corn from China must be something new under our sun, he had them planted, so they grew and multiplied. Last spring I received from a worthy friend, a portion of said corn—it's a new variety—so I gave it the name of China's fall prolific, or tree corn, as it strikes off in two, three, and frequently four branches, in appearance like a small tree, and produces an ear at the head of each branch, whereas the common corn shoot out the ear from the side of the stalk; it grows from eight to ten feet high, produces an abundance of fodder, is a large white flint twelve row corn, and ears from ten to fourteen inches long. I counted six hundred and sixty grains on one ear; it was planted on the 10th of May, and had ears fit to boil on the 10th of July. Its produce was much curtailed by the long drought, but notwithstanding I counted two thousand a hundred and twenty grains, the product of one stalk; being an increase of two thousand from one. The Dutton (which is an excellent corn) planted on the same day, on the same field, and receiving the same quantity of manure, cross ploughing and hoeing, did not produce one half. The patch, about two hundred hills, was examined by many respectable farmers, who all pronounced it something new, and something superior.

The corn may be had of G. C. Thorburn, N. York, and at the store of Wm. Thorburn in Al-

bany, price 25 cents per year; the nett profits to be given to some of the charitable institutions in New York and Albany. Now, if there is a farmer between Maine and the Rocky Mountains who would rather pay 25 cents for two gills of brandy, than to buy one ear of this corn, which will plant one hundred hills—I say, if there is such a man, he ought to be fed on nothing but su-paun and buttermilk as long as his little soul and big carcass will hang together. A stalk, having the ears on, to show the manner of growth, may be seen at the above stores.

GRANT THORBURN.

Hallett's Revue, Sept. 24, 1838.

[*Mr. Thorburn has been sadly unfortunate in his classical allusion. It was not Mr. Jefferson, but Dean Swift who advanced the sentiment which Mr. T. quotes. As written by Dean Swift, it reads thus:

He gave it as his opinion "that whoever could make two ears of corn, or two blades of grass, to grow upon a spot of ground where only one grew before, would deserve better of mankind, and do more essential service to his country, than the whole race of politicians put together."

The sentiment is a noble and a just one, and the Dean should have the credit of its paternity.—*Ed. Farmer and Gardener.*]

St. Louis, Sept. 27.

IMPORTANT TO FARMERS.—A new species of Corn, called the Baden Corn, raised on the farm of Mr. Paul M. Gratiot, in this county, was shown to us yesterday, at the store of Mr. David Tatum, on Water street. Each stock of this corn, has on it from 8 to 10, and sometimes 12 good ears, each ear being well filled, of about the ordinary length of the ear of the northern or yellow corn, and the grain is full and plump. The stalks are from eight to ten feet high. Mr. Gratiot received, some time ago, about half a bushel of this corn, which he planted after the usual manner. Several gentlemen, a few days since, in examining the field, judged that throughout it would average about eight ears to the stalk, and it was thought the yield would not be short of one hundred bushels to the acre.

[If the corn alluded to in the above paragraph be yellow, it is not the Baden Corn, as that variety is white, with a few grains of a yellowish cast interspersed through each ear. There is no doubt but that the genuine Baden is a most prolific bearer, but from our experience we believe it will not generally answer the eastern or middle States of our Union, as, to ensure its thorough ripening, it requires to be planted by the middle of April. Wherever it can be planted in strong, well manured land, by the 1st or 15th of April, if well cultivated, it will doubtless prove a large yielder; but it must be obvious to all, that, to sustain a stalk with from 4 to 7 ears, a large portion of nourishment is requisite; much more than

is usually found in the corn grounds of most of the old States. In any of the new States, where the climate will allow of its being planted at either of the times named, it will be found a most valuable acquisition—so also in those parts of the old States possessing the requisites of climate and soil, where proper attention to its culture may be given.—*Editor Farmer & Gardener.*]

WOOD HOUSE.

Never burn wet wood when you can get dry.

MY WIFE.

Wood for family use ought to be cut the winter before it is intended to be used as fuel, so that it may be thoroughly seasoned. The advantages derived from the use of well seasoned and dry wood, over that which is green or wet, are many, and the economy and pleasantness derived from its use cannot have escaped the most superficial observer. When wet wood is used as fuel it takes nearly one-half the heat produced by its combustion to carry off the moisture from it, and this would be accomplished with much more economy by the air and sun, which cost nothing, before it was hauled to the dwelling, and in the removal of it much animal force would be saved. The expense or trouble of cutting it in advance is nothing, but in some cases there would be a saving by it; as I have frequently known farmers driven to the necessity of leaving very urgent and important business, and turn to and cut and haul green wood for immediate use, and a poor article it was truly, as the good woman could testify when she attempted to cook the family dinner.

Green or wet wood makes much smoke, and the chimney often rebels at being oppressed with it, and sends the excess, over what it can properly discharge in the natural way, into the kitchen or parlor, as the case may be, to the great annoyance of the female part of the family; to the injury of furniture and walls; and more often spoils the cookery, to the great mortification and chagrin of the industrious housewife, who sometimes under such trying circumstances is tempted to scold, and no wonder if she does.

Appurtenant to every farm house, there should be a wood house or shed, in which should be constantly kept a sufficiency of wood, cut and split ready for current use for some weeks or months in advance. The situation of this structure should be such as to furnish convenient access to the female part of the family in all kinds of weather with the least possible exposure; and it should be considered an incumbent duty of the head of the family always to see that there was an adequate supply of dry wood, cut into suitable lengths, so as to be properly adapted to all household purposes at all seasons of the year.

Those who have practised the forgoing system, know well there is a great saving of time and expense in it, and that it adds much to the comfort and convenience of a family, and causes the domestic arrangements to proceed with more quietness and composure.

The expense of such a structure as would be required is not for a moment to be put in competition with its advantages; I therefore hope that every respectable farmer will make his arrange-

ments accordingly, and have a wood house constructed before the coming winter, when the females of his family and neighborhood will

"Loudly speak his praise."

Farmers' Cabinet.

ICE AND ICE HOUSES

In answer to your request for information as to the best plan of building ice-houses, I will merely inform you that I have an ice house that has been used by my family for about fifty years, and has never failed to preserve an abundance of ice for our supplies. It is about 16 by 12 feet, and judging from recollection, for it is now nearly half full, is about 16 feet deep. It was probably dug down to the sand or gravel, is walled like an ordinary cellar, the wall extending about 3 feet above the level of the adjacent ground, and earth thrown against it nearly to the roof. This serves to preserve a uniform temperature, and prevents leakage from rain, &c. The bottom of the cellar is supplied with pieces of timber, say 8 by 8 inches thick, which are placed about 6 inches apart, and this protects the ice from the influence of the earth below. When the ice is being put in I take care to have the bottom and sides well provided with clean rye straw, and have the ice occasionally broken fine, and when the house is full I have it well covered up with the same material. This is all that is necessary to be particular about, as the straw is a non-conductor of caloric, and the ice being well embedded therein, does not melt in the warmest weather. Many years ago this house was lined with boards, which was only useful as a harbor for rats. The lining gradually decayed and has long since been removed, and still the ice is kept as well as ever. Give your ice a dry cellar and plenty of rye straw, and rest assured you will require neither tan nor pulverised charcoal, nor boards to keep it cool.

A PHILA. CO. FARMER.

ON THE CULTIVATION OF GROUND.

As the harvest is past, the summer ended, and the farmer's barn well filled with the bounties of our great Benefactor, I have determined to again resume my pen, as my leisure will increase as autumn advances.

The past summer, owing to its extreme heat, has led me to observe particularly the result of the different modes of cultivation that have come under my observation. My long nursed theory of deep tilling has been fully developed and demonstrated to be based on correct premises, more especially during dry, hot weather. A field of corn, with the ground ploughed as in England, eighteen inches or two feet deep, will survive a drought that would ruin the crop if the same ground had been ploughed but nine inches, the most usual depth of the furrow among a majority of our farmers. This is fully demonstrated in several fields that I have examined, the corn being far superior when the tilling has been deep and frequent. The same rule applies generally to other kinds of vegetables.—The reason is obvious. It is an admitted fact, that the roots of plants penetrate but partially into ground that has never been broken up, unless the soil be purely alluvial and deep mould. It is also well known, that during the most severe heat and drought, the ground contains moisture at some distance from the surface. This distance depends

upon the kind of soil, and should be well understood by the cultivator. If plants are not supplied with moisture from the surface, their roots as naturally descend to obtain it, as the stalk ascends upwards. It follows of course, that during a dry season, deep tilling is of vast importance, to enable plants to obtain the necessary moisture, by descending deeply into the earth. This is not the only advantage arising from deep tilling. When ground is broken up and exposed to the action of the atmosphere and the gases, it becomes improved in all the qualities calculated to promote vigor and health to vegetation. The greater the quantity thus broken up, the more certain and abundant will be the crop. In a wet season it is also advantageous to plough deep. Too much water confined about the roots of plants is certain death. By tilling deep, the water descends more readily, and the roots will be found not to penetrate as far downward as during a dry season, the unerring laws of nature directing and governing them in both cases. In the very kinds of soils that many farmers are most cautious not to plough deep, because by so doing they turn up what they term the "cold ground," this mode of cultivation is of most importance. This "cold ground" is a substratum, in some instances within six inches of the surface, hard, compact, and of various colors, and of various degrees of obstinacy, in some instances being what is termed *hard pan*. It is obvious, that so long as this "cold ground" is suffered to remain in its native state, it will resist the exertions of the roots of plants to penetrate it, giving no nourishment, and in a dry season preventing the circulation of moisture from below, and in a wet one, keeping the water too long about the roots. If farmers, who have lands of the last description, will try this mode of cultivation upon one field, I feel no concern about its general adoption.

Upon grounds of this kind, often considered of little value, manure operates like a charm, its full benefits being retained within the cultivated part of the earth, much longer than when the substratum is of a loose and porous nature. But this will not be the case where the tilling is superficial, because manure requires a certain portion of moisture to promote decomposition. In a dry season, by superficial ploughing, the quantity would be too small, in a wet season, too great. There is a right way to do every thing, which every man may make himself master of by consulting the laws of nature, reason, and science. Without the aid of these lights, we are liable to have our shines bruised at every step.

Another and important advantage arising from deep ploughing, is the superior ease with which the field is cultivated, after having reduced a deep bed of ground to a mellow, neutralized, and loose state. Where it was formerly necessary to use three horses to the plough, two will preform the work with greater ease. But the great desideratum is to obtain an abundant crop. Then by all means adopt my mode of cultivation; plough deep and often, and never plough your ground, turned up when very wet, succeeded by a hot sun and dry weather; I have seen clods baked so hard as to require a hammer to break them, or the action of winter and spring to pulverise them. It is better to put in your seed late with your ground rightly prepared, than to move it when too wet. If farmers will set at defiance the laws of nature, and not

make themselves acquainted with the quality of the soil they occupy, its adaptation to particular kinds of manure and seed; if they will despise the science of agriculture, the most noble vocation of man, and grope in the dark, they need not complain if they are not as amply rewarded for their labor as their more enlightened neighbors. By proper cultivation we can do what has long been done in England, *make every acre support a man*. But before we arrive at this point, we must cultivate less surface and more deeply. We must learn to *know* without the slow process of *experiment*, the kind of manure and seed to which the different soils are best adapted. We must cultivate one acre *well*, rather than ten *superficially*. We must have the *science* of cultivation taught to our sons, if not in our schools, then by our own firesides, in conjunction with the *practice*.

During a recent tour, not a thousand miles north of this county, I was highly pleased to see the improvement of a certain farm, brought about entirely by deep and correct cultivation. It is situated in my native neighborhood, and what is termed *hard pan* land. Its original owner, so long as the vegetable mould lasted, found upon all timber land when first cleared, raised tolerable crops, nothing but the harrow being their necessary to put in the seed. As he commenced his superficial ploughing, his crops were less every year, until he saw nothing in prospect but famine and starvation. With a numerous family about him, he emigrated to the "far west," where himself, wife, and several children, fell a prey to fever, and found an early grave.

This worn out farm, as it was called, was purchased by a young man who had been a hired laborer for several years to a scientific farmer. He began with about two hundred dollars, and an economical wife, just ten years ago. He immediately commenced tilling deep, and was told by his neighbors that he would ruin his land forever, because he turned up the "cold ground." Buildings, fences, and ground, were all emblems of poverty when he took possession. His farm is now the most productive of any one in the neighborhood, he lives in a splendid brick house, has barns and out buildings to correspond, has purchased and reclaimed several tracts of worn out land adjoining and near his first location, milks thirty cows, is clear of debt, and has one thousand dollars out at interest, and will probably make one thousand more from the produce of the present year, besides expenses. In addition to his advantage, his example has put a new aspect upon agriculture in his neighborhood, the farmers being convinced, that to break up deeply and thoroughly the "cold ground," is the only way to make it productive. Anxious as I am for the prosperity of agriculture, I have been thus particular to relate a striking instance, that peradventure some others, I would gladly hope all others, may be induced to go and do likewise.

One word of caution where grasshoppers are thick. Cultivate the ground you intend for wheat and rye so thoroughly so as to kill every vestige of vegetation. The grasshoppers will soon hop off of it. Then leave a strip several rods wide around your field for spring wheat, rye, or oats; sow the centre, the cool nights will soon stop the emigration of these insects, and you will save considerable damage from them.

Bucks County Sept. 1, 1838. OLD BUCKS.

PIGS, &c.—IMPROVED BREEDS.

ROBERT SINCLAIR, Jr. & CO.

Light-street, near Pratt-street Wharf,

Offers for Sale

One pair full blooded BERKSHIRE pigs.
Three do do do BARNITZ do
One do HALLAM and BERKSHIRE do
One do THIN RHIND and BERKSHIRE do
Three do BEDFORD and BERKSHIRE do

—ALSO—

15 pair White India Turkeys and Westphalia Geese.
oc. 16. 3t

SRPING CLOVER SEED,

Just received and for sale, by

R. SINCLAIR, Jr. & CO.

oct. 16

3t

ROBERT SINCLAIR, Jr. & CO.

MANUFACTURERS & SEEDSMEN;

Light street, near Pratt street wharf, offer for sale,

An extensive assortment of Agricultural and horticultural Implements and Seeds, comprising all that are required to stock the most extensive plantation. Particular attention is directed towards the various departments, where the most competent workmen are employed, and durable materials used.

The assortment of Ploughs is large and various, among which are the Double mould board, Sub-soil, Self-Sharpener, Improved Davis, &c. &c.

Wheat Fans—Com. Dutch, Crank Shake and Watkins' Patent.

Corn Shellers—for manual and horse power, warranted to shell 2a700 bushels of Corn per day.

Corn and Cob Crushers—for breaking the cob in suitable size for feeding stock. Stock raisers will find their interest promoted by using this machine by a saving of full 30 per cent.

Cylindrical Straw Cutters—Of these there are several sizes. The late improvements made have rendered them the most perfect and effective straw cutter in this country.

Cultivators, for cultivating corn, tobacco, &c.

Drill and Sowing Machines, for drilling vegetable and grass seeds.

Vegetable Cutters, for slicing Turnips, mangel wortzle, pumpkins, &c.

Harrows—Expanding, com. square and diamond shape. Common Dutch Straw Cutters.

Patent Seeding Plough, made with 2 or 3 mould boards, which are formed as practice and science dictates to be the most perfect mode. The mould and landboard of these ploughs present two edges or sides, which can be reversed when the first course wears out.

Garden Seeds of every variety.

Field Seeds—English and Italian Ray Grass, Trefoil, Burnet, St. Foin, Lucerne, white and red Clover; green and blue Grass; early Potatoes; Gama Grass Roots; Baden and Mercer Corn; Dutton and early white Flint; several sorts garden corn; Italian and Tuscan Spring wheat; Timothy, herds and orchard Grass; Millet, &c.

Trees and Plants supplied at the shortest notice, from the Clairmont Nurseries near this city.

Wanted, prime lots Seed Grain and Grass Seeds.
se 25 tf

IMPROVED DURHAM SHORT-HORNS.

Early in October next, Mr. Whittaker's 2d sale of pure improved Short Horns, will be held at Powelton, near Philadelphia. Due notice will be given of the day of sale, when pedigrees in detail will be furnished.

The subscriber is authorized by Col. Powel to state that all the best cattle which he has at any time imported, and the improved Short-Horns, which he considered the best in England, were either in Mr. Whittaker's possession, or had been derived from his fold. In this sale, Col. Powel has not the slightest interest.

C. J. WOLBERT, Auctioneer.

aug 23

9t

A BOAR AND SOW FOR SALE.

The subscriber is authorised to sell a boar and sow, half Berkshire; the boar is large of his age, being 13 months old, the sow 12 months old, and in pig by the boar; they are both fine animals, and will be sold for \$25. Apply to

oc 2 4t

ED. P. ROBERTS.

TO THE PUBLIC.

Try the New Agricultural Establishment in Grant-street, next door to Dinsmore and Kyle.

Every article warranted to be first rate. The subscribers, grateful for past favors, take this early opportunity of returning their thanks to their customers and the public in general, and beg leave to inform them that they are now provided with a very extensive stock of newly manufactured AGRICULTURAL IMPLEMENTS, suitable to meet the call of Farmers, Gardeners, Merchants, Captains of vessels, and others, viz: 1000 Ploughs, assorted sizes, from \$4 to \$15 each, comprising of the old common Box Shear, Winand's Self Sharpener; Woods & Freeborn's patent, all sizes, "Davis," "Sinclair & Moore's" improved Hill Side Ploughs, highly esteemed for turning the furrow down hill, with wrought or cast shears; Wheat Fans, of various sizes and patterns, from \$15 to \$50 each, warranted to separate the garlic from the wheat; Corn Shellers, from \$12 to \$20; Cutting Boxes, from \$7 to \$50 each; Corn and Tobacco Cultivators, large and small; Expanding do., Wheat Cradles warranted to have fingers of the natural growth, and Grass Seythes, &c. &c.; Castings, of all descriptions and patterns, by the lb. or ton, to suit customers, allowing a liberal discount to merchants buying to sell again—all of which will be furnished on the most pleasing terms and every article warranted to be of the best quality, in proportion to the cost price. All orders by mail or otherwise shall be duly attended to with the greatest despatch.

We would particularly call the attention of Country Merchants and others, wishing to purchase agricultural implements to sell again, to the fact, that we will furnish them with articles on better terms than they can be supplied at any other establishment in the city. Our assortment is complete and as varied as that of the most extensive concern in Baltimore.

We have also connected in its operations with the above branch of business a complete assortment of FIELD AND GARDEN SEEDS, kept by Thomas Denny—Also Garden and Farm Tools, of various sorts and of the choicest collection, which will enable our customers to have filled *entire* all orders in the Agricultural and Seed Departments. mh 26 JOHN T. DURDING & Co.

AGRICULTURAL IMPLEMENTS AND SEED SEORE.

THE SUBSCRIBER informs the public that he keeps constantly on hand at his old establishment in Pratt-street, near Hanover, a large assortment of PLOUGHS and Agricultural IMPLEMENTS generally, which are too numerous to name in an advertisement, but invites such of the public who are in want of any articles in his line to call, assuring them that his work shall be as well made, of as good materials, and on as reasonable terms as any in the State. His patent Cylindrical Straw Cutters made on his late improved plan are kept at all times on hand, of various sizes and prices, with wood and iron frames—and he challenges its equal in any part of the world. Having an iron foundry attached to my establishment, all orders for Ploughs and Machine castings can be furnished at short notice and on reasonable terms.

In store—Herds and Orchard GRASS SEEDS, of prime quality; also, Landreth's superior GARDEN SEEDS. He is also agent for Mr. Samuel Reeves' Nursery, near Salem, New Jersey, whose fruit trees he can recommend to the public with confidence. Those wishing Trees from that Nursery this fall should hand in their orders immediately.

J. S. EASTMAN.

N. B. On hand, two Threshing Machines, with portable horse powers, that can be highly recommended and warranted equal to any in use.

CONTENTS OF THIS NUMBER.

Notice of Mr. Ellsworth's new work, Sketches of the Upper Wabash Valley—do of the Delaware Register—European crops and markets—death by glanders—Philadelphia Agricultural Fair—Maine Potatoes—the Wheat maggot—correction of sour land—cleaning n at cattle—letter from Virginia on the silk culture—Chap al on manures—the silk culture at the East—do in Greece—best sugar manufactory—dimensions of a big hog—rhubarb—Chinese corn—fattening hogs with boiled food—letter on the Chinese corn, by Grant Thorburn—Baden corn—construction of wood and ice houses—on the cultivation of ground—advertisements—prices current.

BALTIMORE PRODUCE MARKET.			
These Prices are carefully corrected every Monday			
BEANS, white field,	bushel.	1 25	—
CATTLE, on the hoof,	100lbs	6 75	8 00
CORN, yellow	bushel	97	—
White	"	93	94
COTTON, Virginia,	pound	9	11
North Carolina,	"	91	11
Upland,	"	91	11
Louisiana — Alabama	"	11 1/2	12
FEATHERS,	pound.	45	50
FLAXSEED,	bushel.	1 12	—
FLOUR & MEAL—Best wh. wh't fam.	barrel.	10 00	10 50
Do. do. baker's	"	—	—
SuperHow. st. from stores	"	7 87	8 00
" wagon price,	"	7 75	—
City Mills, super.	"	7 87	8 00
" extra	"	8 50	—
Susquehanna,	"	—	—
Rye,	"	—	—
Kiln-dried Meal, in hhds.	hhd.	19 00	—
do. in bbls.	bbl.	4 00	—
GRASS SEEDS, wholes. red Clover,	bushel.	—	—
Kentucky blue	"	—	—
Timothy (herds of the north)	"	—	—
Orchard,	"	2 00	2 50
Tall meadow Oat,	"	—	3 00
Herds, or red top,	"	90	1 00
HAY, in bulk,	ton.	12 00	16 00
HEMP, country, dew rotted,	pound.	6	7
" water rotted,	"	7	—
Hogs, on the hoof,	100lb.	7 25	7 75
Slaughtered,	"	—	—
HOPS—first sort,	pound.	9	—
second,	"	7	—
refuse,	"	5	—
LIME,	bushel.	32	33
MUSTARD SEED, Domestic, —; blk.	"	3 50	4 00
OATS,	"	41	43
PEAS, red eye,	bushel.	—	1 12
Black eye,	"	1 00	1 12
Lady,	"	—	—
PLASTER PARIS, in the stone, cargo,	ton.	4 00	—
Ground,	barrel.	1 50	—
PALMA CHRISTA BEAN,	bushel.	—	—
RAGS,	pound.	3	4
RYE,	bushel.	90	95
Susquehanna,	"	—	none
TOBACCO, crop, common,	100lbs	4 00	4 50
" brown and red,	"	4 00	6 00
" fine red,	"	8 00	10 00
" wrappery, suitable	"	—	—
" for segars,	"	10 00	20 00
" yellow and red,	"	8 00	10 00
" good yellow,	"	8 00	12 00
" fine yellow,	"	12 00	16 00
Seconds, as in quality,	"	6 00	—
" ground leaf,	"	5 00	8 00
Virginia,	"	4 50	6 00
Rappahannock,	"	—	—
Kentucky,	"	5 00	8 00
WHEAT, white,	bushel.	1 85	—
Red, best	"	1 73	1 75
Maryland	"	1 60	1 65
WHISKEY, 1st pf. in bbls.	gallon.	46	47
" in hhds.	"	45	—
" wagon price,	"	—	—
WAGON FREIGHTS, to Pittsburgh, ..	100lbs	2 50	—
To Wheeling,	"	2 75	—
Wool, Prime & Saxon Fleeces, ..	pound.	50 to 55	—
Full Merino,	"	45 50	—
Three fourths Merino,	"	40 45	—
One half do.	"	35 40	—
Common & one fourth Meri.	"	35 40	—
Pulled,	"	30 33	—
POTATOES, 60 to 65 cts. a bushel.	"	—	—

BALTIMORE PROVISION MARKET.			
APPLES,	PER. FROM. TO.		
BACON, hams, new, Balt. cured...	barrel.	16	17
Shoulders,	pound.	14	15
Middlings,	"	14	15
Assorted, country,	"	14	15
BUTTER, printed, in lbs. & half lbs.	"	31	37 1/2
Roll,	"	—	31
CIDER,	barrel.	1 75	2 00 1/2
CALVES, three to six weeks old...	each.	5 00	6 00
Cows, new milch,	"	25 00	40 00
Dry,	"	12 00	15 00
CORN MEAL, for family use,	100lbs.	1 75	—
CHOP RYE,	"	1 50	1 60
EGGS,	dozen.	12 1/2	—
FISH, Shad, No. 1, Susquehanna, ..	barrel.	9 75	10 00
No. 2,	"	9 50	—
Herrings, salted, No. 1,	"	5 75	—
Mackerel, No. 1, ——— No. 2 ..	"	12 50	—
No. 3,	"	—	7 25
Cod, salted,	cwt.	3 25	3 37
LARD,	pound.	14	15

BANK NOTE TABLE.			
Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.			
U. S. Bank,	par	VIRGINIA.	
Branch at Baltimore,	do	Farmers Bank of Virgi.	par
Other Branches,	do	Bank of Virginia,	do
MARYLAND.		Branch at Fredericksburg, do	do
Banks in Baltimore,	par	Petersburg,	do
Hagerstown,	o	Norfolk,	do
Frederick,	do	Winchester,	do
Westminster,	do	Lynchburg,	do
Farmers' Bank of Mary'd, do	do	Danville,	do
Do. payable at Easton,	do	Bank of Valley, Winch. par	par
Salisbury,	1 per ct. dis.	Branch at Romney, ..	par
Cumberland,	par	Do. Charlestown, ..	par
Millington,	do	Do. Leesburg, ..	par
DISTRICT.		Wheeling Banks,	2 1/2
Washington, } Banks, 1/2 p.c.		Ohio Banks, generally	3
Georgetown, }		New Jersey Banks gen.	3
Alexandria, }		New York City,	par
PENNSYLVANIA.		New York State,	do 1/2
Philadelphia,	par	Massachusetts,	1 1/2 a2
Chambersburg,	1/2	Connecticut,	1 1/2 a2
Gettysburg,	do	New Hampshire,	1 1/2 a2
Pittsburg,	2 1/2	Maine,	1 1/2 a2
York,	1/2	Rhode Island,	1 1/2 a2
Other Pennsylvania Bks. 2		North Carolina,	3 a2 1/2
Delaware [under \$5]	4	South Carolina,	4 a5
Do. [over 5]	1 1/2	Georgia,	5 a5 1/2
Michigan Banks,	10	New Orleans,	7 a8
Canadian do.	10		

SEED WHEAT & RYE.
275 bushels white chaff bearded wheat
200 do red do do
250 do Italian and Tuscany spring do
All the above of superior quality, and selected particularly for seed. o2 R. SINCLAIR, Jr. & CO.

SPLENDID BLOODED STOCK FOR SALE.
The proprietor of Covington farm will dispose of the following fine bulls on reasonable terms, viz:
One bull two and a half years old.
One do. six months old.
of the improved Durham short horn breed; the dam of the first was got by the celebrated bull Bolivar; for size, form and beauty they are not surpassed by any animal in the state.
Three Devon Bulls, one of which is seven years old next spring, and the largest Devon in the State. The Devons are from the stock of the late Wm. Patterson, and of undoubted purity.
Two half Devon bulls.
Two bulls half improved Durham short horn, and half Devon.
One splendid bull, a cross of the Bakewell, Alderney and Devon.
One bull, half Alderney and half Holstein.
These fine animals may be seen at Covington farm, near Petersville, Frederick county, Md. on application to James L. Hawkins, Baltimore, or to
se 11 f FREDERICK EBERT, Manager.

DURHAM STOCK FOR SALE.
No. 1. Matilda, 3 years old, a dark mahogany red or Devon color; she is out of a half Devon cow, by a full bred Durham bull, and now in calf by one. He price is \$69
No. 2. Beauty, a handsome roan, 4 years old, fresh in milk, possesses the fine points of the Durham; she is half Durham, and her price \$75.
No. 3. Darby, a red and white cow, 4 years old, and half Durham—her price is \$60.
No. 4. Rachel, a dark roan, and most beautiful creature; she is 2 years old; out of No. 2, and by a full bred Durham—her price is \$60.
No. 5. Sally, a strawberry roan, 3 years old, half Durham, in calf by a full bred Durham bull—her price is \$60.
No. 6. Blossom, a white cow with strawberry roan neck, 3 years old, and in calf by a full bred Durham bull—she is half Durham—price \$60.
No. 7. Rose, a brindle and white cow, 5 years old, half Durham, in calf by a full bred Durham bull—price \$60.
No. 8. Tincy, a reddish roan cow, 4 years old, in calf by a full bred Durham bull—price \$60.
No. 9. Haunch, a red and white pied heifer, 2 years old, in calf by a full bred Durham bull—price \$50.
No. 10. Snow, a white heifer, with red neck and ears, 2 years old, in calf by a full bred Durham bull—price \$50.
No. 11. Pink, a white-horn heifer, 2 years old, in calf by a full bred Durham bull—price \$50.
No. 12. Cherry, a half Devon cow, 7 years old, a fine milker, in calf by a full bred Durham bull—price \$60.
No. 13. A beautiful cow calf, 5 months old, out of No. 12, by a full bred Durham bull—price \$20.
The above cattle are offered for sale by the subscriber, at the above reduced prices—terms, cash on delivery.—Applications made by letter to be post paid.
EDWARD P. ROBERTS,
oc 9 3t Baltimore, Md.

THE MARYLAND SILK COMPANY OF BALTIMORE—OFFER FOR SALE,

50,000 Morus Multicaulis or Chinese Mulberry Trees
10,000 Alpine Mulberry Trees selected with care
5,000 Canton do do
5,000 Rose of Lombardy do
10,000 other varieties
Apply to
LUTHER J. COX,
President, Commerce st. Baltimore.

Oct. 9.
[The Silk Cultivist, Hartford, Conn., the Silk Grower, Burlington, N. J., the Farmers' Register, Petersburg, Va. and the Farmer's Cabinet, Philadelphia, will insert the above three times, and forward their respective accounts to this office for collection.]

CHINESE MULBERRY TREES.
American Silk Agency, No. 5, Bank street, Philadelphia.
The subscriber having opened a permanent Agency for the purchase and sale of all articles connected with the culture and manufacture of Silk in the United States, offers for sale all the different varieties of MULBERRY TREES, suitable for raising the SILK WORM; viz: Morus Multicaulis Alpines, Brussa Multicaulis Seedlings, Morus Expansa, Multicaulis Cuttings, Improved Italian Trees, &c. Also, Cuttings from Norton's Virginia Seedlings, and Cunningham's Prince Edward GRAPE VINES. These vines produce an abundant crop of fruit, warranted not to rot or mildew and are fine for the table, and capable of yielding the finest wines.
S. C. CLEVELAND, Agent.

Those who may wish to enter into this profitable branch of national industry, will do well to call at the Agency, and see that they are well instructed in the value of the trees they purchase.
N. B. The particular attention of those engaged in the culture and manufacture of American Silk, whether of trees, Eggs, Cocoons, reeled or manufactured, is called to this agency. The Agent will give every attention to Sales, and prompt remittance of proceeds of any article sent to him. Those who may wish to purchase and enter in this valuable branch of home industry, can obtain from the agent every information, and also such articles as they may want without fear of deception.
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Printing, executed at the Farmer & Gardener office, at short notice.

THE FARMER & GARDENER.

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, E. P. ROBERTS AND SAMUEL SANDS—EDITED BY E. P. ROBERTS.

No. 26.

BALTIMORE, MD. OCT. 23, 1838.

Vol. V.

✂ This publication is the successor of the late
AMERICAN FARMER
and is published at the office, at the N. W. corner of
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month from the time of subscribing, or \$3 if after that
time. All letters to be post paid.

BALTIMORE: TUESDAY, OCT. 23, 1838.

CROPS IN MISSOURI.

We call the agricultural reader's attention to the
letter of our old friend John Smith, Esq. of Dar-
denne, Mo., on this subject. The disinterested
nature of all his communications impart to them
intrinsic value.

THE WHITAKER SALE OF DURHAMS.

Our readers are respectfully referred to the ad-
vertisement, in another column, of the sale at
Powelton, near Philadelphia, of the Durham
stock recently imported by Mr. Whitaker, of En-
gland. The sale takes place on the 5th of No-
vember, and presents a fine opportunity to the en-
terprising breeder to possess himself of this noble
race of animals, a race, which whether regard be
had to the dairy or the shambles, exceeds all oth-
ers in those rare points which give value to the
kind.

WHEAT AND RYE.

If you desire to have good crops of either of
these grains, take our word for it, that you must
lay the groundwork this fall, by running furrows
at intervals of 15 or 18 feet, to carry off the su-
perfluous water, which would otherwise lie upon
the surface, and either drown the young plants
during winter, or be instrumental in causing the
ground in spring to spew them up. The beds on
which all small grain grow, should be kept dry,
so as to avoid those accidents by "flood and field,"
which so beset the path of the husbandman and
disappoint his hopes.

DELAWARE AGRICULTURAL CATTLE SHOW.

The reader will perceive by a notice which we
publish in to-day's paper, that an exhibition will
be held at Wilmington, Delaware, on the 24th
inst. by the Agricultural Society of Newcastle

County; and sincerely do we hope, that it will
prove as honorable to the State as were the
achievements of her sons in those days when iron
hearts battled for freedom—when the chivalry of
the Delaware line was on every patriot-tongue—
when the deeds of those who fought until it would
have been madness to longer contend, and who
"retreated with their faces to the enemy, were re-
membered in the orisons of each maiden, who
with a pure heart and lofty aspirations, offered up
her prayers to Heaven for the success of those
who were to save her and her country from the
'war's desolation.'"

A WORD TO MULBERRY CULTURISTS.

In the selection of ground for your next
spring's culture, choose a high situation with a
southern exposure, a light loamy, sandy, or grav-
elly soil, with a porous sub soil. The exposure
and the soils we name, are the best for the mul-
berry culture. After you have made your selec-
tion of ground, there is one thing which we wish
you to bear in mind—it is this—that it is abso-
lutely essential to plough your ground this fall.
In ploughing recollect the deeper you penetrate
the earth the better. Having so ploughed your
ground, leave the furrows in the rough until
spring, to receive the benefits enuring from frost
and snow. As soon as the frost is out of the
ground in the spring, cross plough, lay off your
furrows, manure them with well rotted manure or
compost, and plant out your mulberries, whether
cuttings or trees. Once planted, they must be
kept clear, and the ground well stirred. The
same culture that a skilful husbandman gives to a
well tilled corn field, will answer for the Mulber-
ry; but let no man expect fine trees, if he designs
to play the part of a sloven.

MORUS MULTICAULIS TREES.

We saw about a week since, in South street, a
number of these trees, which had been shipped
here for sale from the eastward. Their leaves
had been apparently stripped off. Believing that
they have been taken up entirely too soon, and
that there is great danger of the wood shrinking,
and the bark sloughing, unless the utmost care be
taken to prevent it, we feel it our duty to suggest

to such as may have purchased them, the propri-
ety of promptly burying the roots in the ground,
and placing the trees upright, so as to expose the
wood to the action of the sun and air. To us it
appears obvious, that unless the roots should be
immediately placed in a position to draw nourish-
ment from the earth, that an entire loss of all the
wood will be the inevitable consequence, as no
tree with unripened wood, which may be taken
up before the fall of the leaf, and the recession of
the sap to the roots, will bear being long out of the
earth.

In looking at this lot of trees we did not know
which most to be surprised at—the cupidity of
the grower, who, from avaricious motives, could
find a conscience sufficiently elastic to justify his
bringing an unmerchantable article into the mar-
ket—or the credulity of the purchaser, who, in
defiance of the laws of nature and common sense,
could be induced to buy that article, when five
minutes reflection would have convinced him of
its worthlessness. According to our humble judg-
ment, the trees in question were taken up at least
four or five weeks too soon; and we fear that
unless they be treated as we suggest, will prove a
loss to their purchasers. Such a result we should
deeply regret, as disappointed expectations tend
to dampen the ardor of those who might other-
wise prove of infinite service to the silk cause.

AN ACCEPTABLE PRESENT.

About two weeks since as we were wending our
way homewards, an esteemed friend met us, and
observed that he had seen a box, containing two
fine pigs, at the wharf of the Philadelphia Steam-
boat line, marked for us, and having no letter of
advice touching the subject, we were at a loss to
divine their whereabouts; but presuming they were
the property of some one of our subscribers, who
had had them consigned to our care, we sent for
them, and did not know until three days after-
wards, when we received the subjoined letter
from our good friend Col. Bement, of Three Hill
Farm, near Albany, New York, that they were a
present from him. For this unexpected evidence
of his partiality, he will be pleased to accept our
unfeigned thanks, and we beg leave here to assure
him, that the recollection of the kindness of mo-
tive which prompted him thus to manifest his ap-

probation of our humble labors in behalf of the cause of agriculture, will serve to stimulate us to renewed exertions in its behalf; for if there be any thing more than another calculated to nerve the arm and animate the mind, in the pursuit of noble ends, it is the consciousness that one's labors are properly esteemed by those who have the head to appreciate and the heart to reward them.

The pigs are a beautiful pair, and shall not want for that generous *keep*, which their late owner so thoughtfully bespeaks for them; for if it were not in our nature to be kind to those domestic animals which contribute so largely to the comforts of mankind, the knowledge that the Berkshire, and his comely consort, comes from *Three Hill Farm*, where profusion and intelligence abound, would serve so to arouse our latent feelings of pride, as to secure to them every attention which their lineage and onward growth may require.

THREE HILLS FARM, }
Albany, September 29, 1838. }

E. P. Roberts, Esq.—Dear Sir—For the interest and zeal manifested by yourself, relating to agriculture, and more particularly regarding animals, I have forwarded two pigs, which I beg you will accept, as a small tribute of respect, from one who can appreciate your laudable exertions.

The boar is from a sow $\frac{1}{2}$ Berkshire and $\frac{1}{2}$ Mackey, a celebrated breed at the east, which makes her $\frac{3}{4}$ Berkshire and $\frac{1}{4}$ Mackey. The mother died and left nine pigs, only three months old, which I had no idea of ever being able to raise. Not having milk to spare, I applied to a neighbor who had an abundance, and offered to let him take and keep them until they were eight weeks old, and give him one-half the litter.

She is now eleven weeks old, and considering the treatment she has received, I think she has done well, and my neighbor has done justice to them.

The boar is a full bred Berkshire, not remarkable for size, but of fine form and good proportions; and with generous treatment, which I am confident he will receive at your hands, will grow into favor.

In the eastern part of Massachusetts, where I sent a Berkshire boar about three years since, the cross with the Mackey are much approved of, and sell, when weaned, at ten dollars each. The size and length of the Mackey is improved, without detracting any thing from their quick growth and easy-keep. In short, I have never known the Berkshire crossed with any breed, without evident improvement in that breed.

The two sent you are not related—you can therefore breed from them without fear of deterioration.

I shall, in the course of a few days, forward to your care four or five pigs from 4 to 6 months old, for your friend A. Barnes, Esq. of Stafford Hall, near Clearspring, Md.

I am now engaged in gathering my potatoes, which, I am sorry to say, is a light crop, which is

the case generally in this section. From what I have seen and heard on the subject, half, or three-fourths of a crop is all that can be expected, notwithstanding our farmers are hurrying them into market, and selling them to speculators for from 37 $\frac{1}{2}$ to 40 cents per bushel.

The corn crop has not been so good for several years—perfectly hard and ripe, and generally got in, in good order.

The first sowing of ruta bagas were generally swept off by the turnip flea. I sowed my second crop on the 25th of July, and from present appearances, I shall, if the weather proves favorable, take up a good crop. I have between three and four acres, rows 2 $\frac{1}{2}$ feet apart; the plants left from 8 to 9 inches asunder, and the tops completely cover the soil. I have never known a crop to grow faster than they have for the last four weeks.

I have also one acre in carrots and sugar beets, which will yield a large crop, some of the beets weighing from 9 to 10 lbs. each; these I also design for my stock, notwithstanding I have less stock than usual, and more hay than I have ever harvested before. So much for stock and crops.

With considerations of great respect,

I remain your obt. servt.

CALEB N. BEMENT.

AGRICULTURAL ENCOURAGEMENT.

The friends of agriculture throughout this state should not forget to set on foot, in each county, memorials asking of the next legislature such grants as may be required by its peculiar interests. We throw out this hint in order that early action may be had in the premises.

BERKSHIRE AGRICULTURAL SHOW.

The late Agricultural Show at Pittsfield, Berkshire, Mass. exceeded that of any previous year, in the breeds of the animals exhibited, and the qualities of the domestic goods manufactured.—This is the twenty-eighth anniversary of the society—being the oldest of the kind in the United States. The exercises opened with the ploughing match, which drew together a large concourse of ladies and gentlemen. The show of cattle was very large, and among them were seen crosses of all the most esteemed breeds, Durham, Devonshire, Ayrshire, &c. A very great improvement was observed in the quality of the swine.—*New York Star*.

How honorable is the above notice to the members of the Berkshire Agricultural Society! How strangely their constancy contrasts with the members of the hundreds of other societies throughout our country that were, but are not now in existence. Twenty-eight years have these worthy agriculturists been associated together, in laudably furthering the interests of the tillers of the earth, weaving for themselves each year new laurels, and annually adding, by the force of their example, their labors and their improvements, to the comforts of their kind, and the wealth of their

county. Would that the farmers throughout the country would borrow a portion of the zeal and perseverance which distinguishes this time honored association, and set on foot similar institutions in their respective counties. By setting such examples, they will do much towards elevating the agricultural character, and promoting the best interests of our common country.

AGRICULTURE.

The subjoined letters were not sent for publication, and yet they so clearly set forth the very matter of which we would inform our readers, that we prefer letting our friend tell his own story.—*U. S. Gaz.*

PHILADELPHIA, Oct. 17, 1838.

J. R. Chandler, Esq.—Dear Sir: I promised a few days since, to send for your inspection, a few of the Mangel Wurtzel, or Field Beet, raised during the past dry season, on my farm.

The 12 roots sent by the bearer of this note were pulled yesterday morning, from a patch of about three quarters of an acre, planted on the 13th and 14th of May last. They average about 12 pounds each now—what they would have been, had the season proved favorable, I am not prepared to say, as I believe they obtained one half their present size during the last favorable month. In cultivating this crop, I pursued the method laid down by Col. J. Hare Powell, (see *Farmers' Cabinet*, vol. I, page 301) with the addition of six cart loads of leached wood ashes, lightly harrowed in, as a top dressing.

I intend feeding these roots to my imported short horns during the coming winter, and you shall hear the result in the spring.

Very respectfully, yours, &c.

C. J. WOLBERT.

We have seen with pleasure and surprise, the specimens to which Mr. Wolbert refers, and feel pleasure in making known the successful exertions of our liberal fellow citizen to make the earth bring forth its fruits in the season. Men will become more and more attached to the soil of good old Pennsylvania, as its powers to produce are developed by liberality and skill.

The subjoined we commend to the attention of our friends in the far west.

BADEN CORN.

J. R. Chandler, Esq.—Dear Sir: I noticed in the *United States Gazette* a few days since, that Mr. Paul M. Gratiot, of St. Louis, raised during the past season, a very large crop of the Baden corn, many of the stalks bearing from 8 to 12 good ears. As a portion of my time is now devoted to agriculture, and being very anxious to procure seed of all descriptions of the first quality, will you have the goodness to say to one of your friends residing in that section of the country, that I will give five dollars for one stalk of this corn with eight or more ears upon it, and that I will present to the gentleman furnishing me with this stalk, one ear of Mr. Thorburn's celebrated Chinese corn, as I have procured from Mr. T. all of the article he had to spare.

Yours, respectfully,

C. J. WOLBERT.

From Alexander's Weekly Messenger.

ON THE PRESERVATION OF VEGETABLES THROUGH THE WINTER.

Mr. Editor,—As the time will soon arrive for securing vegetables for the winter, a few hints, as to the best mode of preservation, I trust will not prove unacceptable to your readers.

As potatoes stand next to the staff of life in importance, their preservation claims particular attention. I now speak of the sound potato. Few cellars are, during winter, of exactly the right temperature for this vegetable. If too warm, their quality is impaired by sprouting, if too cold, they are injured by frost. By consulting the unerring laws of nature, it will be found that in the bosom of the earth they are best preserved. Every practical farmer has observed the early vegetation of potatoes left in the ground, and near the surface during the winter. It may be a mystery to those who have not investigated the subject, why some, covered by an equal surface, freeze and rot, and others remain sound and vegetate. This circumstance is readily explained. Every potato, to promote its growth, has roots and fibres to support it, which extend beyond the reach of the frost at their extremities, and when the ground becomes thawed, afford immediate nourishment. If removed, these roots and fibres are of course detached, and unless the potato remains long enough in the ground after it has been routed from its original bed, before winter commences, to form a new connection with its mother earth, and is reached by frost, it dies. It may be asked by some, why a portion of the potatoes left in a hill or drill during winter rot, and a part grow. The answer is plain. The sustenance imparted by the roots is not sufficient for *all*, and the larger ones first formed, are often crowded up and detached by those that come after them. If my position is doubted, let the reader explain how potatoes grow spontaneously, year after year, and I may receive new light on the subject.

But to the mode of preserving this root out of the cellar. Having long been an extensive potato grower, I have tried the various methods adopted by farmers, and will state the result of my observations and experience. The kind of ground must determine the mode. Deep holes are always objectionable. Where the soil is dry and light, and the substratum gravelly porous, so as not to retain the water, make a round excavation, sloping at its sides, about six feet in circumference at top, if your potatoes are perfectly ripe, and but four feet in diameter if late and green, and about one foot in depth. In the former you can put about forty bushels, and in the latter about twenty-five.

Too large a quantity in one body, unless remarkably dry, will injure by heat. Bring your piles up to a point at top, with the potatoes picked up from the edge of the excavation, leaving a space around the hole for the reception of the straw. Then place around the pile a layer of straw in a standing position, of about four or six inches thick, secured together at the top by a band. A flat stone or weight should never be put on. Cover this straw with dirt as thinly as possible, and let the whole remain in this situation until the ground begins to freeze. Then put on an additional quantity of dirt, in all about one foot thick. I have se-

cured as many as two thousand bushels in this way in a single year, without any loss. If your ground is clay, or the substratum hard pan, the hole should be dug about three feet deep, and pieces of poles laid across, within one foot of the top, for the reception of the potatoes, leaving a space below for the water, should any penetrate through the covering, which will not be the case if the straw is properly placed around the pile. Rye straw of luxuriant growth, is by far the best. You then cover as in a dry, light soil, sloping the ground from near the potatoes to a ditch, to guard against a collection of water near the potatoes. Some injure their potatoes by putting too large a quantity together, some by burying too deeply, and more by covering them too thick when first put up, causing them to sweat, heat, mould, and consequently, more or less of them will rot. If farmers will tax their recollection, they may remember having seen decayed potatoes at the bottom and middle of a pile in the spring, that could not have been reached by the frost.

If the above method is strictly adhered to, your potatoes will be as safe as the grain in your barn, fire and rats not excepted. They will be much safer than in most country cellars, where thousands of bushels are frozen every winter, and large quantities destroyed by the rats and mice. The same method may be pursued with turnips, which uniformly become pithy in a cellar, and with other esculent roots, all of which are better preserved in the ground than in any other way. They should be perfectly dry when put up.

Bucks Corner, Sep. 14, 1838. OLD BUCK.

We find the following article, on a subject of much importance, in a late number of the "Camden Mail." We commend it to general perusal, as it possesses an interest which should be participated in by every one who has a wish to improve his fortunes.

MR. EDITOR:—

SIR—In my last communication, I promised to furnish some facts to show that very great improvements may be made by changing a portion of the agricultural and manufacturing products of this country. Perhaps your readers will say that my first looks well in theory, but assertion is not argument; and will still doubt its practicability. Will you, Mr. Editor, be so good as to lay before them some extracts from a report of a committee to a meeting held in Philadelphia in 1837, at which the establishment of a company for the production and manufacture of silk was resolved upon.

The committee say, "The periods of the year in which the silk worm is fed, and when only the attention of the farmer and his family is required for their care and management, are those in which the usual labors of the farm are, for a great portion of those periods, not very great; and a large amount of the attention and industry which are required by silk-worms when feeding, and making the cocoon, are most properly furnished by females, and children from twelve to sixteen years old. In the winter season, the family fireside of the farmer, now comparatively without employment, may be engaged in reeling the silk from the cocoons, a most agreeable and profitable occupation for that part of the year."

"A large amount of free labor will be brought

into employ, and the domestic silk trade of the north will one day rival that of cotton, rice, and tobacco at the south." "Three hundred and ten good cocoons make one pound of reeled silk; at that rate, the reeling being done at the manufactory, the silk will cost about three dollars per pound. When cocoons are produced in abundance, the committee are disposed to believe that at twelve cents per pound, the raising them will be as profitable as the raising of cotton at fifteen cents."

"The estimate is made with confidence, that an establishment for the manufacture of silk into plain and ordinary articles, will cost no more than about one-eighth of a cotton factory, to turn out the same number of dollars worth of work; and with equal, if not greater profit."

"The present prices of raw silk are, Bengal, \$4.25 to \$6 per pound; China \$5.50 to \$6; Italian, \$6.60 to \$7 per pound."

"Floss and sewing silk, made from Bengal silk would cost—raw material, say \$5.25 cents,—dyeing, manufacturing and waste, \$1.50 per pound of 14 oz.—\$6.75. These articles are now worth—sewing silk \$10 to \$11; Floss \$11 to \$12."

"The amount of sewing silk used in the United States is immense. To manufacture enough of this article to supply the demand almost any amount of capital could be employed with little cost of machinery. It has been ascertained, that in the town of Hartford, Connecticut, the sales of sewing silk amount in one year to \$5,000 dollars."

Dr. Lardner estimates the annual quantity of silk used in England alone, at more than four millions of pounds of weight. Owing to the humidity of their climate, they are obliged to purchase this vast amount abroad—the amount of silk used in the United States would soon quadruple even the vast quantity now used in England were it to become generally an article of domestic manufacture.

We will now turn our attention to a communication of Robert Sinclair, published in the Farmer and Gardener, and the remarks of the Editor thereon. The substance of Mr. Sinclair's communication is, that from the first year's growth of the *Morus Multicaulis* "he raised from cuttings of one bud each, about 3 inches long, per acre, 10,080 pounds of leaves, the first season from cuttings—and a large portion of these leaves were produced in season for feeding the second crop of worms."

The Editor remarks thereon, that as 1000 lbs. feed 201,600 worms, and as 3000 worms will make a pound of silk, so will the aggregate make 67 1-5th lb. of silk."

From a communication of Lemuel Cobb, in the N. E. Farmer, it appears that Messrs. Cheney of Connecticut, raised silk at the rate of 50 lbs. to the acre, from the first year's growth of the *Morus Multicaulis*, planted in layers. Dr. Lardner, the Editor of the Cabinet Cyclopaedia, in his history of silk, states that it proved "not only practicable, but profitable in Connecticut, where land was comparatively high rented, but where careful and intelligent white laborers might be procured." Here, then, is evidence enough combined to convince the most sceptical, not only that it can be produced, but that by substituting the cultivation of the Mulberry tree for some of our comparatively small crops, we might receive in

nett profit, at least ten fold. If from cuttings we may the first year raise 50lbs. of silk, in the after years we may generally raise 100 lbs. as we may then gather two crops of leaves in one season.—This, as has been shown by prices of foreign silk, would be from \$425 to \$700 per acre, or in sewing \$1000, two-thirds of which must be nett profit. I ask again, farmers, *why* do we import, or buy 25 or 26,000,000 dollars worth of silk per annum? Why not supply our own market? Why not, instead of gazing at a few nabobs with their "gold shining through their *silken purses*," see our entire population of all ages, sexes and classes, as well clad, as those yellow shiners; or as "in the widely spread region of China, where all, from the Emperor on his throne, to the peasant in his lowly hut, are indebted for their clothing to the labors of the silk worm;" and why not do something toward supplying the foreign market?
 AGRICOLA.

From the N. E. Farmer.

THEORY OF THE ACTION OF LIME ON SOILS, MANURE, &c.

The action of lime is three-fold, each distinct.

1. It is a *Neutralizer*: 2. A *Decomposer*: 3. A *Converter*. 1. I have already alluded to some acid soils: free phosphoric acid, geic, acetic, and malic acids, also occasionally exist in a free state in soils. Here lime acts as a neutralizer. 2. Soils may contain abundant geates; particularly geate of alumina, the least of all demanded by plants. Long formed and sun-baked, they are scarcely acted on by rain or dew, and are almost useless. Here lime, by decomposing these metallic and earthy geates, forms a combination, which, in its nascent state, is readily dissolved. If the carbonate of lime acts better than the hydrate, it is because, following a well-known law, double decomposition is easier than single. If any acid geine exists in the soil, or any free acids, carbonic acid is then liberated; it acts on the geate of lime, supergeates result, and these are easily soluble.

3. The great use of lime is as a *converter*, turning solid and insoluble, nay, I go further, solid vegetable fibre, into soluble vegetable food. Here is the great puzzle, the point where our philosophy seems to leave us; giving us our choice, to refer this action to one of the numerous cases of mysterious '*catalytic*' change, with which we are becoming every day more and more familiar, or to explain the process by referring the whole to *saponification*. I use this word as conveying to you at once what I mean;—but I do not mean to say that the product of lime and vegetable matter is soap; but I cannot make myself more intelligible to a farmer than by saying, this lime makes compounds of vegetable matter just as it makes soapy compounds of oil and fat. The action of lime on geine I take to be of the same nature, as its action on oils and fat. It is well established that animal and vegetable oils and fats are converted into acids by the action of alkalis, earths, oxides, and even by vegetable fibre itself. The general law, is, that whenever a substance, capable of uniting with the acid of fat or oil, is placed in contact with fat or oil, it determines the production of acid. Now we have seen that alkali produces a similar change; on geine it develops acid properties. I go further, if alkali has con-

verted vegetable oil and geine into acids, I see no reason why a similar action may not be produced by all those substances which act thus on oil. Hence *lime*, earths, and metallic oxides, convert geine into acid: as fast as this takes place, so fast it becomes soluble. Then too the long action of air on insoluble geine, rendering it soluble, is it not analogous to the action of air on oils? Both evolve in this case, vast volumes of carbonic acid, the oil becomes gelatinous and soluble in alkali; does not a similar change occur in geine? It is possible that during the action of lime on geine, a soluble substance may be produced, bearing the same relation to this process that glycerme does to saponification. These views you will see need to be followed out experimentally. If found tenable, the most signal benefit will result. We place manures on a new foundation, on which great practical results may be erected.

Practical application of the theory of the action of lime.

Taking the preceding principles as our guide, we may lay down a few general principles for the application of marls.

1. Enough ought to be applied to neutralize all the free acids in a soil; which may be known by its ceasing to produce acid plants, such as sorrel and pine. Generally, however, the amount required for this purpose is small.

2. It will be serviceable to add enough to convert the earthy geates of a soil into geate of lime. The richer a soil is, the greater we may conclude is the quantity of geates which it contains.

3. It will be serviceable to add enough to convert all the insoluble geine and vegetable fibre in a soil into soluble geine. Hence the richer a soil is, and the more manure is added, the more marl will it bear with benefit. Indeed, *there appears to be no danger of adding too much marl, provided a sufficient quantity of manure be also added*. Ignorance of this principle, I apprehend, is the source of most of the failures that have occurred in the use of lime upon soils. Farmers have supposed that its action was like that of common manure, viz. to serve as direct nourishment to the plant; whereas it only *cooks the food*, if I may be allowed the expression, which exists in the soil, or is added along with the lime. In nearly all cases of over marling which I have read of, a fresh supply of manure has been found to be the remedy, which shows the truth of the above principle. Agriculturalists have spread marl alone, or with very little manure, upon land that has been worn out, that is, whose geine has been exhausted; and because such soils have not thereby been recruited, they have inferred that lime was injurious. Without acids, or geine, or geates, or vegetable fibre, to act upon, much excess of lime appears to operate injuriously, so as to diminish, instead of increasing the crop. They have also expected a sudden and surprising increase of fertility: whereas in some cases the chief benefit seems to consist in causing the land to produce for a greater number of years, by preventing the ultimate decomposition and escape of the organic matter. In general, however, it will add also to the yearly product: but those who employ marl or lime in any form, ought to moderate their expectations that they may not be disappointed, and to be satis-

fied if they can slowly improve their lands, as they most assuredly can do, by this substance, provided they do not expect to accomplish it by the use of lime alone.—*Hitchcock's Re-Examination of the Geology of Mass.*

From the Genius of Liberty.

MR. RICHARDS: Having been a constant reader of your well conducted paper, I have frequently been at a loss to know why it is that you have to borrow almost altogether from other papers, and far-fetched authors, upon the subject of farming: a subject intimately connected with the interest of your readers. Is it not a pity that such apathy and indifference pervade the intelligent and respectable class of farmers of our county? Much useful and *correct* information might be imparted. Every week you allow one or two columns for "agricultural" information; and why have not some of our intelligent old farmers given you original communications upon a subject that not only interests them, but deeply interests all classes and conditions of men? Can it be attributable to a want of knowledge, or experience in the various farming relations? That cannot be.—Old Loudoun can produce *knowledge and experience*, in all matters relating to farming operations. Perhaps I may answer the question in the fact, that the most of her *practical* farmers are more of *working* than *writing* men. Though I am myself a working man, (I am not ashamed, though, perhaps, rather *proud* to own it,) yet, I can find time to write a few lines, at least once a week: and I am naturally led to believe others can, also, *if they would*, who are much more able, and, by far, more experienced than myself.

If the above will be the means of bringing forth some of our intelligent *practical* farmers, (I would not give a rush for the chaffy effusions of mere "theoretical agriculturists") on the great, and permit me to add, *GRAND* subjects of AGRICULTURE, my object will be obtained.—For one, however, though not laying any claims to be heard particularly, I beg leave to give my views, at the present time, upon the subject of

CUTTING OFF CORN.

At this season of the year, perhaps, most of our farmers are thinking upon the subject of cutting off their Corn. The old Virginia practice has been to pull the ears about the first of November, and then haul the corn to the barn to be shucked out. However, this practice has now measurably given way, particularly with graziers, to, as I think, a much better plan, that of cutting it off about 4 or 6 inches above the surface of the ground, and shocking it, from 16 to 20 hills square. This practice obtains, evidently, from the fact that it will yield more than as much again provender, and in the end be as little trouble. I don't think it necessary to undertake to prove this position at this time. However, I know many think as I once thought myself, the old plan the least trouble; but to such, I would say, *MAKE THE TRIAL*. Then, in addition to this, only take into the account how much better you can prepare your ground for seeding your winter grain; consequently it will yield the next harvest proportionably to the order in which it is put in. To this fact all, I presume, will readily subscribe.

As the mode, or *operandi*, by which I cut off my corn is somewhat different in its connection from some of my neighbors, I will give it to you, and perchance others may be induced to take my plan. I think it decidedly the best. With my hands I go through the field in the first place and tie every 16 hills square, 4 of the hills together—that is, across each other, which forms a support for the shock of corn. Without this I have found it very difficult many times to *begin* the shock, but having a support at once, much time is saved in the process of shocking—a great desideratum with the farmer in busy seasons. I then, having previously prepared my corn knives, go at once to the “delightful task” of cutting it down, observing, of course, to leave the 4 stocks tied as the support for the shock, throwing four rows in piles together. In about 4 to 6 days I gather it up, and shock it as above stated. This is my practice, if I defer cutting until *all* my corn is sufficiently ripe. Great care must be taken not to cut your corn too green. Many think to save the fodder, corn must be taken green. This is an egregious mistake. True it is the *fodder* may be *some* better by cutting it in a green state, but the *corn*, by far the greater consideration, will doubtless be injured. This should, by all means, be guarded against. Besides, fodder *apparently* dead will yield a good and wholesome, and also, with the stocks and shucks, a strong and nutritive food for your cattle, as you need desire.

But to avoid the probability of cutting your corn too soon, I recommended, more particularly this year, the process of “riddling” your corn—that is, take such stalks as *are* ripe, and as many stalks have no ears at all this season cut them also, and put it up as above stated. You will find that the support for the shock (the four hills tied together, already described,) will be sufficient, for the present, without the trouble of tying it around at the top with fodder.—This, then, will have time to *cure*, and it being in the middle of the shock will be less liable to injury. In about ten days or a fortnight, as your corn may ripen, cut down the whole.—This I give you as the best plan to be followed one year with another, for two reasons: first, all the *ripe* corn and fodder well cured is in the middle of the shock; and secondly, so much of it is done; consequently, the second time going over it will be much lighter work and quicker done, and, as I have already stated, less, liable to injury. When you have got it all shocked up, tie the tops well, some three or four stocks of fodder strongly twisted together, so as to prevent as much as possible the rain, &c. entering the shock.

The next, of course, is the preparing for seedling, which, as I have run this number to considerable length, I shall reserve for another communication. A FARMER.

MOUNT CARMEL, Sept. 13. 1838.

TO SALT BUTTER.—Beat very well up together in a marble mortar, half a pound of common salt, 4 oz. of saltpetre, and 3 oz. of powdered loaf sugar. To every pound of newly made butter, (the milk being well drawn off by beating) put an ounce of the mixed powder; incorporate it well, and put the butter in pots for keeping. In about a month—not before—it will be fit for use; and it will continue for ten years as good as butter newly salted.

CROPS OF MISSOURI.

DARDENNE P. O. Mo. Sept. 27th, 1838.

Mr. Roberts—From information obtained subsequent to my communication of the 6th inst. I find that I was mistaken as to the extent of the country through which the corn crop was universally good, for although it is good, excellent throughout a large proportion of the Mississippi valley, yet in particular districts it is light in consequence of the drought, which has been so disastrous east of the Alleghany ridge. In some parts of Kentucky there will be only about half an average crop made, while in other parts the present crop is equal to any previous one; and in Ohio the same remarks will probably apply, though my information with regard to Ohio is rather limited. From Tennessee I hear nothing definite as to the corn crop, but below that state the crop of the present season is represented as the very best the country has produced as it regards the whole country west of the States named above, the statements made in the letter referred to above are literally true. As there is no tobacco cultivated in my immediate neighborhood, I forgot to say any thing on the subject of the tobacco crop here, although one of considerable importance to the State, both as it regards the quantity and the quality of the article produced here. The same causes that have reduced the amount of the present crop at the East, as compared with former crops, have had their influence here, though not to the same extent, (viz. the failure of the seeds to grow,) but there is probably more than half the usual quantity made the present season; and it is represented on all hands as the very best crop in quality that has been made in the country. In the 19th No. of the Farmer & Gardener, some statements are contained on the diminished quantity of beef that will be taken to market this season from the middle Atlantic states, in consequence of the failure of the corn crop and the pasturage; now, if we could but obtain the cattle that you have and cannot fatten for want of food, it would suit us exactly, for we have not, nor can we obtain more than half the cattle that we could conveniently feed the present season. The crops here have been inferior for several successive seasons past, and consequently stock has increased in numbers commensurate with the other resources of the country, and now that we have again made a full crop, we have not stock to consume it.

The weather is extremely dry here now, and has been for a great length of time so dry that we cannot put in our fall crops. Some farmers sowed their fall crop more than a month since, and some of the crops sown thus early have perished out in toto; not a living sprig is to be seen in large fields, while other crops have lived thus far, though apparently suffering much, and others are being devoured by insects of various kinds.

Those farmers that have sown within the last four weeks have experienced a total failure, as the seed vegetated and perished before it took root. The weather is still unusually warm for the season; we have had the finest season to save fodder that has ever been seen. The earth, the air, and all other substances have been so absorbent, that we could cut and put up any quantity of corn we pleased together at once, and in less than two days it was perfectly cured, and that work is now about done. Yours, respectfully,

JOHN SMITH.

From the Yankee Farmer.

RECIPES TO MAKE THE BEST CIDER.

Take dried apples, rinse clean, and let them soak 20 or 24 hours in cold water, enough to cover them. This liquid can be diluted with more water if desirable. This decoction is a beautiful acid drink for sick persons, without having the pernicious, alcoholic nature which abounds in fermented cider. Country people are often recommending cider “to start the stomach” of sick persons, or as an acid to clear the organs; but common fermented cider toughens phlegm in the consumptive, and produces more inflammation on the lungs, and in the dyspeptic stomach, it stops or greatly hinders digestion, irritating and feverishly exciting the coats of that organ, which is the “great wheel” of the factory that continues the thread of mortal existence.

I do not recommend *this*, even as an *habitual* drink, but as a medicine, where acids are needed, as sometimes lemons are not to be had.—But there can be no drink so good for well persons as *water*, and in fact it is a good *medicine* to clear out the humors of the system, when drank in the spring of the year. Running brook water, soft and pure,—of the right temperature,—and drank only as thirst demands, when the system is not too much heated, is certainly, “a good creature of God.” The cattle upon a thousand hills are the unperjured witnesses of the truth of this declaration; but “man alone is vile,” and tastes forbidden things with appetite diseased and heart depraved, and thus destroys himself.

While on the subject of cider, let me say farther, that it seems to me, the farmer who makes and vends it, does not consult his *pecuniary interest*; for it has been clearly demonstrated, that apples can be put to a more profitable use.—Now if he will let the pigs run in the orchard and pick up the windfalls, it will fatten or cause them to grow nicely through the months of August, September and October, without extra feed, and if afterward they are boiled and mixed with meal, they are worth much more than potatoes for swine.

EXPERIENCE.

June, 1838.

[Zion's Herald.]

NATIVE GRAPES—A *non-descript*—We yesterday received from Nicholas Longworth, Esq. a bunch of native grapes, which he states are a *non-descript*. They were very small, being only from a quarter to about three-eighths of an inch in diameter, of a deep purple color and delicious flavor. The stem on which they grew is ten inches in length, and the number of grapes upon it, including about 20 dry ones, was 155! There is no doubt in our mind, but that, with two or three years cultivation, this grape may be brought to grow of the usual size, and would then become one of the finest fruits with which to grace a table, not inferior to the famous white sweet-water, which are imported from Spain and Italy in such large quantities, and sold at such enormous prices, frequently at half a dollar per pound. Half an acre of land cultivated in these grapes for the table, if it yielded equal to our friend Resor's Catawba, and we see no reason why they should not, for they are as great bearers as any grape in Europe, would bring in more than \$2000 without incurring an expense of \$20.—Cincin. Post.

For the Farmer and Gardener.

PREVENTIVE OF THE DESTRUCTION OF BUGS.

DEAR SIR—As many of your patrons have no doubt suffered in common with myself from a little black bug which attacks the young cabbage plants, allow me to offer them, through your paper, an infallible preventive. I have it from a friend from Louisiana, who has been in the habit of using it for several years; it will also prevent injury from the same cause to the grapes. The gentleman alluded to, informs me, that until he made the discovery, he could not succeed in having a bunch of grapes in his garden, and that now his vines are crowded. I have no doubt it would prove equally efficacious with tobacco plants.—The remedy is to water the plants with water well impregnated with elder leaves, which may be prepared without much trouble, in the following manner: Place a large tub, barrel or half hog-head near the bed; throw in a bushel or two of Elder leaves; let it remain until it becomes somewhat offensive; then occasionally water your plants with it, and I will guarantee that your plants will escape the bug. My friend Mr. H. tried it the past season, and after the second watering, there was not a bug to be seen.

Yours,

W. G.

Balt. Co., Oct. 18, 1838.

The Osage Orange Tree—The St. Louis, Mo. Gazette gives the following interesting description of this indigenous tree of Arkansas, called there bow-wood, and named by Nuttall the *maclaura aurantica*:

"The wood has the color of the Fustic of commerce, but has a livelier yellow. It has apparently as much coloring matter as the Fustic, and is used extensively for dyeing yellow in the lower country. It is used for bows by the Indians, being very firm and elastic. It has been used here for gun stocks; and for knobs for bureaus, bearing a close resemblance to satin wood. Being allied to the mulberry, it has been found a valuable substitute for it in feeding silk worms. It has been highly recommended for making hedges, being covered with thorns about three-fourths of an inch in length, which render a hedge composed of it impervious to man or beast—and it would doubtless be a valuable tree for hedges, on the prairies of Missouri and Illinois. The fruit, when ripe, is yellow. At this time, it resembles an unripe lemon precisely, except that the skin is more deeply serrated. The fruit is solid throughout, and resembles a green melon or cucumber, having a scent and taste similar to the latter.

"It has, in this city, a rapid growth, some of the present year being six or seven feet in length, and it may, we are told, be propagated by slips or cuttings."

TO PREVENT THE RAVAGES OF RATS IN GRAIN.

How to prevent the ravages of rats in grain after it is housed, has been an enquiry of long standing. We can never exterminate them to such a degree as not to apprehend their incursions, for a horde of these troublesome visitors will often make their appearance when we least expect them. Instinct points the way to where that provision best suited to their nature is found most plentiful.

We have often found when we went to thrash, our oats cut and cleaned by them, and the straw rendered unfit for any purpose whatever, even the subservient one of litter.

But every evil has a cure; and I have found *common elder* to be a preventive, and have tested its properties as an anti-rat application. When the grain is to be packed away, I scatter a few of the young branches over every layer of bundles, being mindful to have them in greatest abundance on the edges of the pile. The drying of the twigs will give the grain an odor not relished by the vermin—which scent in no wise detracts from the quality of the straw for horses, as it makes no difference with them. I have tried it successfully, a number of years, in wheat, oats and corn.—*Huntington Gazette*.

CHEESE MAKING.

The following directions for making cheese, are followed at the most celebrated dairies in New England. They were furnished for the American Farmer:—

From long experience I have found the following to be the best method of manufacturing cheese, viz. Add the night's milk with the morning's milk, and gently heat it over a fire in a kettle to ninety-four degrees, then put it into a tub or vat, then add a sufficient quantity of prepared annatto to give it a handsome yellow colour; next add a sufficient quantity of rennet to make it curd in 25 minutes—when curded, make use of a wooden knife or sword of sufficient length to reach the bottom of the tub, and chequer it all in squares of about two inches; it is important that it should all be chequered to the bottom—then let it stand until the whey appears above the curd, say from 15 to 20 minutes; then break it up carefully with the hands in such a manner as not to bruise or break the pieces of curd: next place a clean strainer on top of the whey and curd, and press it down gently, so as to cause the whey to rise on top, then lade off the whey with a dish or dipper, what can be conveniently taken off in that way; then place a cheese strainer in a cheese basket over a tub, and carefully remove the curd and remaining whey into it, and cut it into slices with a thin skimmer, until the whey has mostly drained out; then bring the corners of the strainer together, and twist them so as to press the curd into a solid mass, and place the twisted corners down in the basket, and place a clean board, about a foot square on the top of it, on which place about twenty pounds weight in order to press out the whey and consolidate the curd. After remaining in this situation about 15 minutes, the curd is to be cut in pieces of about one inch square with a knife resembling a common carving knife, then to be put into the strainer exactly as before stated, with the weight on it, and remain from ten to fifteen minutes, and then cut as last stated, and so repeated from six to ten times until the whey has entirely done dripping from it—after which it is taken out and cut into pieces of about two inches square and put into a wooden bowl, and chopped with a chopping knife until the pieces are about the size of an Indian corn.

The next process is scalding, which is done by putting the curd into a strainer and putting it into a kettle of hot whey, heated to 126 degrees and

no more, for if the whey is too hot it will ruin the cheese and make it hard and dry. While in the whey, it must be stirred with the hand, until the whole is equally heated; it is then taken out and put into the cheese basket over a tub, and a sufficient quantity of clean fine salt thoroughly mixed with it, to give it a high salt flavour, and let it stand until it is hardly blood warm; then the corners of the strainer are twisted together as before, when it is put in the hoop destined for the purpose, and placed in the press and pressed in this instance, with the average weight of 100 lbs. to every ten pounds of curd: to remain about half an hour in the press, then taken out and turned in the hoop and replaced in the press and add about one third to the weight in pressing, or press it about one third harder than before and let it remain about 3 hours; then it is taken out and placed in a clean fine linen cloth, (pains should be taken that the cloth should be perfectly smooth, and no wrinkles in it,) it is put again into the hoop and pressed for forty-eight hours, being turned once during the time. At this pressing about one third additional weight must be added—it is then taken out and oiled, and put on the shelf to cure, where it must be turned, rubbed, and oiled, at least every twenty-four hours until it is perfectly cured.

My method of preparing the oil I use on cheese is as follows, viz:—I put the whey I scald the curd in, into a tub and let it stand about 24 hours, and an oil arises on the surface, which I skim off and put into a kettle and simmer it over a moderate fire, when the sediment will settle to the bottom, and I pour off a beautiful pure oil which is fit for use. For painting cheese I make use of the best Spanish annatto. I would here take the liberty to remark, that there is a great deal of counterfeit Spanish annatto, manufactured in this country, and is good for nothing; and it appears to those who are perfectly acquainted with the article to be of good quality, and the people have been much imposed upon with it for the last ten years. Take eight ounces of Spanish annatto, or in proportion as may be wanted, and put it into three gallons of weak ley, made from pot or common ashes, and boil it until it dissolves and becomes of a bright yellow color—thus it may be put into milk as before described. To prepare the rennet to put into the cheese I take the calf's second stomach immediately after the calf is killed, and take out the contents, which I do not use, as it is of no use, (as some have mistakenly supposed,) as by using it the cheese is injured thereby. I rinse the bag clean with cold water, and rub it all over with fine salt, and lay it away to dry; when dry I make about one gallon of brine to each bag by mixing as much clean alum salt with hot water as the water will dissolve, and after the brine is cool I put in the bag, and when it has soaked several days it will be fit for use.

L. H.

Winchester, Litchfield County, Conn.

We gave to our readers some weeks ago a copious analysis and review of a very able Report made to the New York House of Assembly, by Mr. Ruggles, from the committee of Ways and Means, in exposition of the resources of the state, and in favor of a vigorous prosecution of its Internal Improvements. This able Report seems to have attracted

a good deal of attention in England, and is said to have given additional confidence in American securities there; and it has received the further flattering distinction abroad of having been translated into French by order of the Minister of Public Works, as furnishing an unanswerable argument in favor of the awakened spirit of improvement in France.—*Nat. Intel.*

POTATOES.

It is stated, on respectable authority, that, by taking up the potatoes intended for seed, the next year before they are ripe, (before they are full grown,) and exposing them to the sun, for a month or six weeks, and at planting time, observing the eye cut, and placing upward, will secure, without any other trouble or expense, a crop of every variety of the potatoe, six weeks earlier than the same variety of the potatoe will produce if allowed to grow ripe.

[Arcana of Useful Knowledge.

BADEN CORN.

Several planters in the vicinity of this city have made an experiment with this corn, and so far as we can learn, notwithstanding the unfavorable season we have had in this section of country, they seem well pleased with it, and we have heard some of them express the opinion that its yield, in a favorable season, will no doubt far exceed the common gourd-seed. We have now in our office two stalks of this corn, from the plantation of Mr. Samuel Clarke, with seven good ears and twelve nubbins, which we would say will equal in product five ears of the common corn, making an average of six good ears to each stalk. Such of our agricultural friends as have experimented with this corn will oblige us by furnishing the result of their observations.—*Augusta, Geo. Chron.*

CATTLE SHOW.

The annual Cattle Show of the Agricultural Society of New Castle county, will be held in Wilmington, on Wednesday, 24th inst. The following persons have been appointed Judges to award Premiums:

Of Neat Cattle, Edward Tatnall, Wm. J. Hurlock, W. So'omon, Wm. Chandler, Geo. Maxwell.
Of Horses, Philip Reybold, Thos. Garrett, Henry du Pont, Alexander S. Read, James Webb.
Of Oxen, John Clark, James McCullough, Thomas S. Blandy, Richard Topham, Wm. Robinson.
Of Swine, Benjamin Webb, Samuel Canby, Thomas Stockton, John S. Caldwell, Samuel P. Johnson.
Of Sheep, John Higgins, William Johnson, Eli Wilson, Joseph Wetherald, George Platt.
Of Crops, Samuel Wollaston, David W. Gemmill, John Platt, Jesse Gregg, Jacob Faris.
Of Butter, Merritt Canby, James J. Brindley, Edmund Canby, Dr. Henry Gibbons, Edward Grubb.
Of Silk, James Canby, Dr. James S. Naudain, Wm. H. Jones, James Price, Jas. S. Miles.
Of Farming Utensils, Andrew Gray, Dr. James W. Thomson, Benjamin Whiteman, Jos. Hossinger, Thomas Massey, Jr.

All persons having animals to exhibit are requested to inform some one or more of the following committee of arrangement at least a week before hand, how many and what kind of stock they intend exhibiting, so that pens may be prepared to accommodate them, viz. Samuel Wollaston, W. Chandler, B. Webb, Edwd. Tatnall, and Dr. James W. Thomson.

Dinner will be prepared for the members at the City Hall, Wilmington, Del. at 2 o'clock. oc 23

SPRING CLOVER SEED,

Just received and for sale, by

R. SINCLAIR, Jr. & CO.

oct 16

FOR SALE,

A valuable FARM of prime soil, on the Western Run in Baltimore county, about two miles north west of the 14th mile stone of the Baltimore and York turnpike road, and at the same distance from the depot of the Baltimore and Susquehanna rail road, at Cockey's tavern, in a rich, highly cultivated and healthy tract of country.

This farm contains from 260 to 270 acres, having a full proportion in wood, much of which is building timber, peculiarly valuable in that neighborhood; is in the best state of cultivation; a considerable part in productive timothy meadow, and the residue of the arable land, not in grain, is well set in clover, the whole under good fencing, laid off into convenient fields, each of which is well watered. The farm has a large quarry of excellent building stone. There are on the premises an apple orchard of select fruit trees, which seldom fail to bear abundantly; a valuable mill seat on the Western Run, with a race already dug. There is no location in the country more favorable for a grist mill, having the advantage of a rich and thickly settled neighborhood, and a good public road leading thence to the turnpike road. Buildings substantial and convenient, being a STONE DWELLING, and kitchen of two stories; a large stone Switzer barn, with cedar roof and extensive stabling below; large hay house and stable for cattle; stone milk house near the dwelling, with a spring of fine never failing water, with other out-houses. On the country road near the mill-seat a good house and shop for a mechanic, under rent to a good tenant. It is well known the lands on the Western Run are in every respect equal, if not superior to any in the county. Adjoining or near are the lands of Col. N. Bosley, Daniel Bosley, Thos. Matthews and others. The water power, with about 20 acres of land, is so situated that they may be detached and sold separately, without injury to the rest of the farm for agricultural purposes. Terms of sale will be liberal. Apply to

NATHANIEL CHILDS,
on the premises, or to
WILLIAM J. WARD,

Fayette, near Calvert st. Baltimore.

oc 23 tf

COMPETITION.



Much has been said lately about the superior growth of the *Morus Multicaulis* in Virginia, and the greater maturity of the wood for cuttings, &c. We now offer to exhibit one, two, three or more thousands of our trees with any plantation of one year's growth of the same kind existing in Maryland or Virginia, and if ours are not superior in the growth of the wood to any other parcel of similar extent, we will pay to the owner of the other parcel 1000 dollars, or one thousand of the trees, he agreeing to a similar forfeit if the reverse is the case. The truth is, their growth is as great in Connecticut and Rhode Island as in Virginia, and trees of 2 and 3 years old are here found to be as hardy as an apple tree.

WM. PRINCE & SONS,
Flushing, New-York.

oc 23

2t

IMPORTED DURHAM SHORT-HORNS.

The subscriber respectfully gives notice, that Mr. Whitaker's improved Durham Cattle have arrived per the ship Octorara, and that the public sale of this fine stock will positively be held on Monday, the 5th of November next, at 11 o'clock precisely, at Powelton, near Philadelphia. oc 23 1t

C. J. WOLBERT, Auct.

PIGS, &c.—IMPROVED BREEDS.

ROBERT SINCLAIR, Jr. & CO.

Light-street, near Pratt-street Wharf,

Offers for Sale

One pair full blooded BERKSHIRE pigs.
 Three do do do BARNITZ do
 One do HALLAM and BERKSHIRE do
 One do THIN RHIND and BERKSHIRE do
 Three do BEDFORD and BERKSHIRE do

—ALSO—

15 pair White India Turkeys and Westphalia Geese.

oc. 16.

3t

FARMERS' REPOSITORY OF AGRICULTURAL IMPLEMENTS AND EASTMAN'S CYLINDRICAL STRAW CUTTERS IMPROVED.

THE Subscriber informs the public that he has secured by letters patent his late and very important improvements on his Cylindrical Straw Cutter, by which improvements they are made more durable and easier kept in order. All the machinery being secured to an iron frame the shrinkage, wear and decay of wood is avoided. The feeding part of his improved machine is upon an entire different principle from the former machine; far more durable, requiring neither skill or care to keep it in order. These machines are so constructed as to make the freight on them less than half what it cost to ship the former or wood machines, an important desideratum to purchasers living at a distance; and I now offer it to the public upon the credit of my establishment as the most perfect machine in existence for the same purpose. They are also adapted to cutting rags for paper making, and for cutting tobacco as manufactured by Tobaccoists, &c.

I also keep these machines on hand made as heretofore with my new feeding machinery attached to them; and also a general assortment of Agricultural Implements, as usual. Elliott's Horizontal Wheat Fans, and Fox & Bolland's Threshing Machines are both superior articles.

My stock of Ploughs on hand are not equalled in the city either for quality, quantity, or variety. I have a large assortment of Plough Castings at retail or by the ton, and having an Iron Foundry attached to my establishment can furnish any kind of Plough or Machine Castings on reasonable terms and at a short notice.

All repairs done with punctuality and neatness. On hand, a few Patent Lime Spreaders, Horse Powers, &c. &c.

Also just received, a fresh supply of Landreth's superior Garden Seeds. In store, superior Timothy and Orchard Grass Seed and Seed Oats. All implements in the agricultural line will be furnished by the subscriber, as good and on as reasonable terms as can be had in this city, with a liberal deduction to wholesale purchasers. Likewise will receive orders for Fruit Trees from Mr. S. Reeves' Nursery, New Jersey.

JONATHAN S. EASTMAN,

Pratt street, Baltimore,

Between Charles & Hanover sts.

feb 20

A BOAR AND SOW FOR SALE.

The subscriber is authorised to sell a boar and sow, half Berkshire; the boar is large of his age, being 18 months old, the sow 12 months old, and in pig by the boar; they are both fine animals, and will be sold for \$25. Apply to oc 2 4t

ED. P. ROBERTS.

THE AMERICAN FARMER.

The proprietors of this paper have a few complete sets of this work on hand, which they will dispose of at the reduced price of \$50 a set.—They are half bound and comprise each 15 volumes. The American Farmer, it will be recollected, was the pioneer in agricultural improvement in this country, being established in 1819 by John S. Skinner, Esq., to whose talents and industry its pages are indebted for, perhaps, the most valuable collection of agricultural matter to be found in any work extant. Those who desire to possess themselves of this valuable work will make early application as the number for sale is very limited.

CONTENTS OF THIS NUMBER.

Notice of the crops in Missouri—do. of the Whitaker sale of Durhams—hint relative to wheat and rye—Delaware agricultural cattle show—to mulberry culturists—morus multicaulis trees—an acceptable present from Mr. Bement—hint to Maryland farmers—Berkshire, Mass. cattle show—culture of mangel wurtzel and corn in Pennsylvania—on preserving vegetables in winter—on the silk culture—action of lime on soils, manure, &c.—on cutting corn—to salt butter—crops of Missouri—recipe to make cider—native grapes—preventive of the destruction of bugs—Osage orange tree—to prevent ravages of rats in grain—cheese making—notice of a report on N. Y. internal improvements—to have early potatoes—Baden corn—advertisements—prices current.

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every MONDAY

	PER	FROM	TO
BEANS, white field,	bushel.	1 25	—
CATTLE, on the hoof,	100lbs	7 50	7 75
CORN, yellow	bushel.	97	—
White,	"	93	94
COTTON, Virginia,	pound	9	11
North Carolina,	"	9 1/2	11
Upland,	"	9 1/2	11
Louisiana — Alabama	"	11 1/2	12
FEATHERS,	pound.	45	50
FLAXSEED,	bushel.	1 12	—
FLOUR & MEAL—Best wh. wh't fam.	barrel.	10 00	10 50
Do. do. baker's,	"	—	—
SuperHow. st. from stores	"	7 87	—
Wagon price,	"	7 75	—
City Mills, super,	"	—	—
extra	"	—	—
Susquehanna,	"	—	—
Rye,	"	5 50	—
Kiln-dried Meal, in hhds.	hhd.	19 00	—
do. in bbls.	bbl.	4 00	—
GRASS SEEDS, wholes. red Clover,	bushel.	—	—
Kentucky blue	"	—	—
Timothy (herds of the north)	"	—	—
Orchard,	"	2 00	2 50
Tall meadow Oat,	"	—	3 00
Herds, or red top,	"	90	1 00
HAY, in bulk,	ton.	12 00	16 00
HEMP, country, dew rotted,	pound.	6	7
water rotted,	"	7	—
Hogs, on the hoof,	100lb.	7 50	7 75
Slaughtered,	"	—	—
HOPS—first sort,	pound.	9	—
second,	"	7	—
refuse,	"	5	—
LIME,	bushel.	32	33
MUSTARD SEED, Domestic, —; blk.	"	3 50	4 00
OATS,	"	41	43
PEAS, red eye,	bushel.	—	1 12
Black eye,	"	1 00	1 12
Lady,	"	—	—
PLASTER PARIS, in the stone, cargo,	ton.	4 00	—
Ground,	barrel.	1 50	—
PALMA CHRISTA BEAN,	bushel.	—	—
RAGS,	pound.	3	4
RYE,	bushel.	90	95
Susquehanna,	"	—	none
TOBACCO, crop, common,	100lbs	4 00	4 50
brown and red,	"	4 00	6 00
fine red,	"	8 00	10 00
wrappery, suitable	"	—	—
for segars,	"	10 00	20 00
yellow and red,	"	8 00	10 00
good yellow,	"	8 00	12 00
fine yellow,	"	12 00	16 00
Seconds, as in quality,	"	6 00	—
ground leaf,	"	5 00	8 00
Virginia,	"	4 50	6 00
Rappahannock,	"	—	—
Kentucky,	"	5 00	8 00
WHEAT, white,	bushel.	—	—
Red, best	"	1 60	1 65
Maryland	"	1 50	1 60
WHISKEY, 1st pf. in bbls.	gallon.	46	47
in hhds.	"	44 1/2	—
wagon price,	"	—	—
WAGON FREIGHTS, to Pittsburgh,	100lbs	2 25	—
To Wheeling,	"	2 50	—
Wool, Prime & Saxon Fleeces,	pound.	50 to 55	—
Full Merino,	"	45	50
Three fourths Merino,	"	40	45
One half do.	"	35	40
Common & one fourth Meri.	"	35	40
Pulled,	"	30	33
POTATOES, 60 to 70 cts. a bushel.	"	—	—

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,	barrel.	—	—
BACON, hams, new, Balt. cured....	pound.	16	17
Shoulders, do.	"	14	15
Middlings, do.	"	14	15
Assorted, country,	"	14	15
BUTTER, printed, in lbs. & half lbs.	"	31	37 1/2
Roll,	"	—	31
CIDER,	barrel.	1 75	2 00 1/2
CALVES, three to six weeks old....	each.	5 00	6 00
Cows, new milch,	"	25 00	40 00
Dry,	"	12 00	15 00
CORN MEAL, for family use,	100lbs.	1 75	—
CHOP RYE,	"	1 50	1 60
EGGS,	dozen.	12 1/2	—
FISH, Shad, No. 1, Susquehanna,	barrel.	9 75	10 00
No. 2,	"	9 50	—
Herrings, salted, No. 1,	"	5 75	—
Mackerel, No. 1, ———— No. 2	"	12 50	—
No. 3,	"	—	7 25
Cod, salted,	cwt.	3 25	3 37
LARD,	pound.	14	15

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

		VIRGINIA.
U. S. Bank,	par	Farmers Bank of Virgi. par
Branch at Baltimore, do	do	Bank of Virginia, do
Other Branches, do	do	Branch at Fredericksburg, do
MARYLAND.		Petersburg, do
Banks in Baltimore, par		Norfolk, do
Hagerstown, o		Winchester, do
Frederick, o		Westminster, do
Westminster, do		Lynchburg, do
Farmers' Bank of Mary'd, do		Danville, do
Do. payable at Easton, do		Bank of Valley, Winch. par
Salisbury, 1 per ct. dis.		Branch at Romney, ... par
Cumberland, par		Do. Charlestown, par
Millington, do		Do. Leesburg, ... par
DISTRICT.		Wheeling Banks, 2 1/2
Washington, } Banks, l.p.c.		Ohio Banks, generally 3
Georgetown, } Banks, l.p.c.		New Jersey Banks gen. 3
Alexandria, }		New York City, par
PENNSYLVANIA.		New York State, do a 1/2
Philadelphia, par		Massachusetts, 1 1/2 a 2
Chambersburg, 1/2		Connecticut, 1 1/2 a 2
Gettysburg, do		New Hampshire, ... 1 1/2 a 2
Pittsburg, 2 1/2		Maine, 1 1/2 a 2
York, 1/2		Rhode Island, 1 1/2 a 2
Other Pennsylvania Bks. 1/2		North Carolina, 3 a 2 1/2
Delaware [under \$5] 4		South Carolina, 4 a 5
Do. [over 5] 1 1/2		Georgia, 5 a 5 1/2
Michigan Banks, 10		New Orleans, 7 a 8
Canadian do. 10		

SEED WHEAT & RYE.

275 bushels white chaff bearded wheat
200 do red do do
250 do Italian and Tuscany spring do
All the above of superior quality, and selected particularly for seed. o 2 R. SINCLAIR, Jr. & CO.

SPLENDID BLOODED STOCK FOR SALE

The proprietor of Covington farm will dispose of the following fine bulls on reasonable terms, v. z.
One bull two and a half years old.
One do. six months old.
of the improved Durham short horn breed; the dam of the first was got by the celebrated bull Bolivar; for size, form and beauty they are not surpassed by any animal in the state.

Three Devon Bulls, one of which is seven years old next spring, and the largest Devon in the State. The Devons are from the stock of the late Wm. Patterson, and of undoubted purity.

Two half Devon bulls.
Two bulls half improved Durham short horn, and half Devon.

One splendid bull, a cross of the Bakewell, Alderney and Devon.

One bull, half Alderney and half H. lstein.

These fine animals may be seen at Covington farm, near Petersville, Frederick county, Md. on application to James L. Hawkins, Baltimore, or to

se 11 f FREDERICK EBERT, Manager.

DURHAM STOCK FOR SALE.

No. 1. Matilda, 3 years old, a dark mahogany red or Devon color; she is out of a half Devon cow, by a full bred Durham bull, and now in calf by one. He price is \$69

No. 2. Beauty, a handsome roan, 4 years old, fresh in milk, possesses the fine points of the Durham; she is half Durham, and her price \$75.

No. 3. Darby, a red and white cow, 4 years old, and half Durham—her price is \$60.

No. 4. Rachel, a dark roan, and most beautiful creature; she is 2 years old; out of No. 2, and by a full bred Durham bull—price \$50.

No. 5. Sally, a strawberry roan, 3 years old, half Durham, in calf by a full bred Durham bull—her price is \$60.

No. 6. Blossom, a white cow with strawberry roan neck, 3 years old, and in calf by a full bred Durham bull—she is half Durham—price \$60.

No. 7. Rose, a brindle and white cow, 5 years old, half Durham, in calf by a full bred Durham bull—price \$60.

No. 8. Tiney, a reddish roan cow, 4 years old, in calf by a full bred Durham bull—price \$60.

No. 9. Haunch, a red and white pied heifer, 2 years old, in calf by a full bred Durham bull—price \$50.

No. 10. Snow, a white heifer, with red neck and ears, 2 years old, in calf by a full bred Durham bull—price \$50.

No. 11. Pink, a whitish roan heifer, 2 years old, in calf by a full bred Durham bull—price \$50.

No. 12. Cherry, a half Devon cow, 7 years old, a fine milker, in calf by a full bred Durham bull—price \$60.

No. 13. A beautiful cow calf, 5 months old, out of No. 12, by a full bred Durham bull—price \$20.

The above cattle are offered for sale by the subscriber, at the above reduced prices—terms, cash on delivery.—Applications made by letter to be post paid.

EDWARD P. ROBERTS,
oc 9 3t Baltimore, Md.

THE MARYLAND SILK COMPANY OF BALTIMORE—OFFER FOR SALE.

50,000 Morus Multicaulis or Chinese Mulberry Trees
10,000 Alpine Mulberry Trees selected with care
5,000 Canton do do
5,000 Rose of Lombardy do
10,000 other varieties
Apply to
LUTHER J. COX,
President, Commerce st. Baltimore.

Oct. 9. 3t

[The Silk Culturist, Hartford, Conn., the Silk Grower, Burlington, N. J., the Farmers' Register, Petersburg, Va. and the Farmer's Cabinet, Philadelphia, will insert the above three times, and forward their respective accounts to this office for collection.]

CHINESE MULBERRY TREES.

American Silk Agency, No. 5, Bank street, Philadelphia.
The subscriber having opened a permanent Agency for the purchase and sale of all articles connected with the culture and manufacture of Silk in the United States, offers for sale all the different varieties of MULBERRY TREES, suitable for raising the SILK WORM; viz: Morus Multicaulis Alpines, Brussa Multicaulis Seedlings, Morus Expansa, Multicaulis Cuttings, Improved Italian Trees, &c. Also, Cuttings from Norton's Virginia Seedlings, and Cunningham's Prince Edward GRAPE VINES. These vines produce an abundant crop of fruit, warranted not to rot or mildew and are fine for the table, and capable of yielding the finest wines.

S. C. CLEVELAND, Agent.
Those who may wish to enter into this profitable branch of national industry, will do well to call at the Agency, and see that they are well instructed in the value of the trees they purchase.

N. B. The particular attention of those engaged in the culture and manufacture of American Silk, whether of trees, Eggs, Cocoons, reeled or manufactured, is called to this agency. The Agent will give every attention to Sales, and prompt remittance of proceeds of any article sent to him. Those who may wish to purchase and enter in this valuable branch of home industry, can obtain from the agent every information, and also such articles as they may want without fear of deception.

oc 9 3t
Printing, executed at the Farmer & Gardener office, at short notice.

THE FARMER & GARDENER.

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, E. P. ROBERTS AND SAMUEL SANDS—EDITED BY E. P. ROBERTS.

No. 27.

BALTIMORE, MD. OCT. 30, 1838.

Vol. V.

✂ This publication is the successor of the late
AMERICAN FARMER
and is published at the office, at the N. W. corner of
Baltimore and North streets, over the Patriot office, at two
DOLLARS AND FIFTY CENTS per annum, if paid within one
month from the time of subscribing, or \$3 if after that
time. All letters to be post paid.

BALTIMORE: TUESDAY, OCT. 30, 1838.

Gama Grass—While on a visit at *Brookland Wood*, a few days since, we were gratified to learn that a patch of this grass on that estate had yielded very handsomely the present season, having afforded *three* good cuttings, and we think we may fairly assert, that any grass which will, under the disadvantages of the drought of the last summer, bear three crops of grass, is a valuable acquisition to the farmer.

MULBERRY CULTURE.

A correspondent at Bel-Air, Md., asks us the following questions:

1. Which is the best time to take up and bury the *Morus Multicaulis* trees?
2. Whether in our opinion *now* is the best time to lay the root and one stalk of these trees: whether it is not preferable to waiting till the spring: and whether they should not be covered from 5 to 6 inches?

REPLY.

With respect to the first question, we reply, that the best time to take them up is when the frost causes the leaves to fall.

As regards the second question, our answer is, that the spring is the preferable time to layer the root and stalk, when the root should be covered about 3 inches and the stalk 2 inches.

Time and manner of layering—As soon as the frost is out of the ground, and the soil is warmed by the genial influence of the air of spring, cross plough your ground, (which should have been ploughed this fall) lay off your furrows 4 feet wide, and put in your trees two feet apart.

Mode of preserving—Select a dry piece of ground with a porous substratum, dig a trench about 4 feet wide, lay your trees in in layers, covering each layer of 50 trees with sand, and when the whole are in, put about 3 or 4 inches of sand over the upper layer, then top the whole with about 5 or 6 inches of earth, bringing the pile to a point on the top so as to carry off the

rain. Be careful to so arrange the ground around the pile of mulberries, as that no water will lodge, as it is important to keep them dry. Thus put away they will keep in perfect safety.

Prices of Mulberries in the Baltimore market.

Sales of *morus multicaulis* trees are now making in the Baltimore market at 10 cts. for the root with 1 bud, and $2\frac{1}{4}$ cts. per bud for the main stem and lateral branches.

CAMPBELL CO. AGRICULTURAL FAIR.

We are happy to find by the last *Lynchburg Virginian*, that Campbell county Agricultural Society were to hold their Agricultural Fair this day. Such exhibitions, besides the good which flows from bringing together the intelligence of a county, serve in an eminent degree to stimulate enterprise, excite a spirit of generous rivalry by the medals and prizes distributed. It is not the mere nominal value of a medal or a premium which imparts appreciation to either, but the being considered among a host of competitors the *most worthy*. Who amongst the high-minded citizens of Campbell, who may bear off a *cup*, or an *urn*, will not feel that the trophy is of priceless value? Which of them when he conveys this flattering testimony of his superior skill to the wife of his bosom and the children of his love, will not be received with feelings of well merited pleasure and pride? Is there a matron, or a maid of our land, as she points to it on her sideboard, to her neighbor, but would do so in evidence of her husband or her father's merit? May the farmers of our country one and all follow the noble example of those of Campbell, and institute a similar association!

We copy with pleasure the following notice of the first exhibition of the *Chester and Delaware Agricultural Society*, from the *West Chester Village Record*. We say it gives us *pleasure*, because we are sanguine enough to hope that the entire success of this infant institution will serve to arouse a proper feeling throughout the country, in every county where no similar institution exists, and that, by the force of its excellent example, a thousand societies may spring up, and thus be the means of advancing the interests of agriculture.

The exhibition of the stock, generally, appears to have been of an encouraging character; but the sight of the *four* hogs, 14 months old, weighing 2,200 lbs. by Mr. *Robb*, must have been a truly gratifying sight; and as we have a *passion* for animals of their ponderous magnitude, which comes to such early maturity, we should be pleased to learn something more of their peculiar breed and feeding habits; and by the way, we should feel greatly indebted to the worthy editor of the *Record*, if he would ascertain whether Mr. *Robb* could furnish us with a pair of pigs of the same breed, and at what price.

AGRICULTURAL EXHIBITION.

The first exhibition of the *Chester and Delaware Agricultural Society*, held on Wednesday last, was every thing that had been expected by the society. From the very unusual drought of the past summer, the exhibition was held under great disadvantages; but the experiment has established the practicability and utility of the society beyond a doubt. The collection of cattle, horses, oxen, bulls, cows, &c. was highly respectable, and remarkable for their size, form and keep: many of them were beautiful animals. The *Devonshire* bull of Mr. *TRAVILLA*, particularly, attracted great admiration; and also the giant oxen of herculean strength, belonging to Mr. *WOODWARD*, as well as the handsome cow recently imported by Mr. *MORRIS*. Four hogs, 14 months old, weighing collectively 2200 pounds, attracted great attention as well for their size, as their excellent symmetry and proportions. They were owned by Mr. *ROBB*. The collection of sheep, was also worthy of, and received great attention. Several pens displayed the skill of our best feeders,—*Green*, *Bradly*, *Cope*, *Hoopes* and others, both in the size, quality and beauty of the animals. The exhibition was attended by some of the best horses in the country; noted for their blood and performances. Besides the stock, we observed at the show a number of agricultural implements, ploughs, &c.

The exhibition drew together a great number of farmers from all parts of the counties of *Chester* and *Delaware*, who appeared to be universally pleased with the result of the day. They certainly feasted their eyes upon as fine a collection of cattle, sheep and swine as *Chester* and *Delaware* ever exhibited—and we hope they may long live to witness the future exhibitions of their most worthy society.

In this hasty notice we have not touched many objects deserving of honorable mention. We have just glanced at the exhibition, and shall await the official report of the proceedings, which will make their appearance in about three weeks; when the premiums will also be announced.—*West Chester (Pa.) Village Record*.

LIME.

Beltsville, October 25, 1838.

To the Editor of the Farmer and Gardener:

I am now burning a kiln of oyster shells.—Please inform me what disposition had better be made of the lime—whether apply it to grass, top dressing grain, or mix it with farm yard manure, and use it as a compost in the spring. I have a large yard to my barn that has been ploughed several times this year, to mix the earth with the manure, as I want to haul out the centre of the yard to give it proper shape to retain the liquid manure. I had some idea of spreading a portion of lime and mixing in with it. Any information you can give, will be acceptable to

Your ob't. serv't,

TRUEMAN BELT.

We cheerfully comply with the request contained in the above letter, and in answer thereto would remark:

1. That lime may be advantageously used as a top-dressing either to grass or grain; that the sooner it is applied this fall the better; that its benefits will be greatest where the soil itself contains the most undecomposed vegetable matter; and that if the grass land be *sour*, its effects will be most salutary, indeed, as by neutralizing the acid with which it may come in contact, it will improve the texture and quality of the hay.

2. Instead of mixing the lime with the farm-yard manure intended for next spring's use, we would preserve it separate and dry until spring; haul out the manure then, plough it in, and apply the lime on the surface, and harrow it in. The natural tendency of all mineral manures, is, from their specific gravity, to sink, and should, therefore, be kept as near the surface as possible. By so disposing of the lime, every rain which descends will carry down to the alimentary manure, covered up as recommended, a sufficiency of *condiment* to promote decomposition, and carry on a healthy growth of the plants.

3. The earth which our correspondent contemplates taking out of the centre of his barn-yard and hauling it out, may very advantageously be mixed with a portion of the lime, and will of itself form a most excellent top-dressing for either his grass or grain; or may with excellent effect be used on his corn-hills next spring, in the proportion of one shovel full to every four hills of corn. Barn-yard earth always being highly charged with the salts and resinous matter contained in the staling of cattle, is, of itself, a most appropriate and invigorating food of plants, generally, and of none more than those of corn; and wherever there is a fair proportion of vegetable matter in the soil, the addition of lime greatly adds to its value.

An excellent Cow—The Northampton Courier

states that a cow belonging to Mr. Henry Kent of West Springfield, during sixty days, beginning in June last, has given 1336 quarts of milk! averaging $22\frac{1}{2}$ per day! largest yield 11 quarts in the morning, in the evening 16 quarts! The details of this wonderful yield of milk were last week all laid before the Agricultural Society.

The damage to the crops, &c. on the Tar river, and its tributary streams in North Carolina by the storm of the 28th ultimo, has been estimated at three millions of dollars.

BRITISH CROPS AND MARKETS.

The following brief extracts from the latest European arrival on the above subject, will, doubtless, prove interesting to our agricultural readers.

THE ENGLISH HARVEST.—The weather had continued fine for harvesting, especially in the North of England and in Scotland. The Leeds Mercury says, "with very few exceptions every species of corn is fully ripe, and the farmers are busy getting it in. The crops of barley and oats are, we believe, rather over than under the average, and will be reaped in good condition, but the wheat, though in many places abundant, and in most, perhaps, uninjured, has suffered enough to reduce the crop below an average."

In North Lancashire the corn (wheat) was in most places fully ripe, and the farmers were getting it in with great expedition, but it was feared that there would not be more than half a crop, being much ravaged by the yellow grub. A considerable proportion of the grains, too, were hard and shrivelled, and others were soft and pulpy, and would not ripen. The oat and barley crops promised well.

LIVERPOOL, Sept. 26.—There are small arrivals of grain and flour coastwise and a good number of foreign ships with wheat. Very little English wheat was on sale to-day, and foreign remains firm at Monday's prices. Barley is very dull, and last day's rates are scarcely supported. Beans and peas are unvaried. Oats are the turn dealer, as the quantity on sale is short. In the flour trade there is no alteration.

LIVERPOOL COTTON MARKET, Sept. 22.

The import of the week is 16,034 bags, namely, 13,807 from the United States, 2,085 from Brazil, and 142 from the West Indies. The sales of the week are 22,680 bags, of which there are taken on speculation 500 American, and for export 1400 American, 700 Surat, and 100 Madras. The market is without alteration in prices.

Sept. 26.—Cotton.—The sales on Thursday last were 3000 bags; Friday 3500; Saturday 2500; Monday 5008; Tuesday 2500; and to-day 3000. There has been a moderate demand since last week; in prices there is no variation, and the market continues steady, though dull, with the same material feature as last week. The week's import amount to 25,347 bags.

Sept. 27.—Cotton.—The sales since Friday amount to 15,000 bags, of which 2500 are sold to-day, prices being maintained at last week's cur-

rency. The arrivals are—7 vessels from the United States, 4 from Brazil, 1 from Egypt, 1 from Peru, and 3 from the West Indies.

THE ROHAN POTATO.

We find the following notice of this newly introduced variety, in one of Thorburn's advertisements. We have seen a small lot of these potatoes, and think highly of them, and have no doubt they will prove a valuable acquisition to our country.

This potato was introduced into this country from Switzerland, and surpasses all others in size and productiveness, and is for stock an unrivalled production; it is also said to be farinaceous and of excellent flavor. Three tubers chosen at random weighed 13 to 31 oz., 11 to 9 oz., and 9 to 13 oz., and a small tuber, having only four eyes, weighed, when planted, a few grains less than half an ounce, produced $48\frac{1}{2}$ lbs.; the earth is dug 20 inches deep, and the sets containing two or three eyes, are dibbled in, four feet apart. This statement is from an Agricultural paper in Switzerland. "The Cultivator" for Nov. 1837, (page 142) remarks, "We obtained two tubers from France last fall, and the kindness of an esteemed friend near Catskill enabled us to increase our seed to twelve pounds. We divided the tubers into sets of two eyes each, and planted one set on a hill, four feet apart, in a piece of ground much shaded; and in rather low condition. We dug, measured and weighed the crop on the 28th September, it weighed 525 lbs., and measured 9 bushels; 35 of the largest tubers filling a bushel basket. We have hardly been able yet to decide upon the quality of this potato, having barely tasted of one; yet we deem it equal to the English white. Others, however, in whose opinion we place great confidence, do not hesitate to pronounce them superior for the table; they are undoubtedly the most productive variety of the potato we have met with."

Mr. Peck of Adams, Mass., from two of these potatoes planted the present season, had a yield of 75 lbs. 7 oz.; a bushel weighed 61 lbs., and 50 potatoes to a bushel, and this fine return in the present unfavorable season for potato crops.

From the Public Ledger.

AMERICAN SILK.

Messrs. Editors.—The philanthropists and patriots of our country must be highly gratified with the rapid development of our various resources for the promotion of wealth and the stimulants to industry. Among these, the growing of cotton has become of vast national importance, as also of individual wealth. It is but a few years since 50,000 bales of cotton was considered a great amount to be raised, nearly all of which was exported to Europe; but now, we consume in our own manufactories 300,000 bales annually, and export 1,000,000 bales more.—Meanwhile, the price which at first was over 30 cents per lb., is now at 10 cents. Yet such are the improvements in its production, that it pays the grower larger profits at the present than at former prices.

The staple next in importance to cotton is just

now opening upon us, viz : the growing of silk—an article which our countrymen had nearly overlooked in their hurry and enterprise, and about which, without examination, they supposed there was some hidden mystery in the production of the material, from which fabrics so beautiful are made—that it never could be attained in a young country; but how different is the *fact*. A few enterprising individuals having turned their attention to the subject, it has been fully demonstrated that its production in our favored land is yet more simple than the raising of cotton—that, in fact, it does not require any more skill than the raising and shelling of corn—while the *profits* far outstrip every other agricultural production, not even excepting cotton. Who will not rejoice that a new source is thus opened for the profitable employment of every person, male and female, who chooses to turn their attention to the subject. It invites every class—every one can choose the amount they desire to embark—a hundred or a hundred thousand dollars can be advantageously employed in the growing of the trees and feeding the worms—and here, at our own doors, and in our own healthy climate, the introduction of this extraordinary mulberry tree, called *Multicaulis*, is calculated to produce a new era with our agriculturists. This tree is admirably calculated for producing food for the silk worm. The leaf is very tender and nutritious, and the silk of the worms which are fed upon it, has a beautiful gloss. This tree is easily raised and multiplied, and, south of New England, stands the climate as well as any other tree. The leaves are very large and easily gathered. It is said they can be raised for 14 cents each, some persons think for 12½ cents, and even as low as 10 cents, while they readily bring 40, 50, and 75 cents, according to their size. This is a most fortunate circumstance for the rapid introduction of silk raising in this country; because many persons who have not yet obtained knowledge of the great profit upon feeding the worms and raising the silk exclusively, are nevertheless alive to the great advantage of raising and selling trees, and this will enable the inhabitants of all the middle, Southern and Western States to obtain supplies much sooner than they otherwise could. Even now, I understand that there are large orders from the South which cannot be filled. This must stimulate our farmers to new exertions in raising them for next year.

Another singular advantage in this business arises from its entire freedom from any risk by those who grow the trees; for when, in the course of years, the country becomes supplied with trees, and sales slacken off, or entirely stop, each planter will then have a fine orchard, which he can immediately use for feeding the worms, and this will give him a nett profit of \$500 to \$1000 per acre per annum, as I will show in a subsequent article.

The enterprise of our countrymen is strikingly exhibited in another point. The tree was imported from France, and then, as now, the trees thus imported are little meagre plants, not to be compared with those which we raise. The plants a few years since were purchased in that country for 8 to 12½ cents—but such has been the demand, and the supply so short, that they are now

worth 18 to 30 cents each, and few to be had; this, however, is no loss, for it is seldom that of those imported and sold here, one half grow. Several lots have been lost entirely by having too long a passage, and in general they are wagoned a distance from the interior, and much injured before shipping. A person importing should calculate that only half will grow; it is highly probable, however, there will never be another tree imported. I know the fact, that several persons who have imported for two or three years, have quit it entirely, in consequence of the great risk and small profit with frequent loss.

If you permit, I will shortly again intrude upon you, and will then demonstrate that a person purchasing trees at 62½ cents each, can realize 19 per cent. for his money the first year, by raising silk and without selling a tree, and the second year he will quadruple it, and so on; and as for the matter of raising silk, any person in the least conversant with the consumption in this country and Europe, will see that we cannot raise enough with all our efforts in the next twenty years, to affect perceptibly the market value of the article.

AMERICANISM.

Silk Culture—The York, Pa. Republican of Wednesday gives an item which will be very encouraging to those who are *now actively* engaged in providing food for the silk worm: "In the spring of 1836, two persons in that borough purchased trees and cuttings of the *Morus Multicaulis*, to the amount of \$170. Within the last week, about two-thirds of the products of this purchase were sold at auction for \$2800, cash." It is added that "neither of these persons had any previous knowledge of the business, or the increase might have been much greater." As it was, however, the business seems to have afforded "a living profit."

Mulberries! Mulberries!—Naught is heard on every hand but the magical sound—*Mulberries!* It employs the eloquence of every tongue, is the theme of every group, and occupies alike the attention of the farmer, the merchant, the professional man and the mechanic. The aged, middle aged, and young, are all engaged, in one way or another, in the mulberry traffick.—Thousands upon thousands of trees have changed hands within a month or two past, and thousands yet remain to be added to the account. The demand is increasing, and prices advancing, and where they will stop no one can tell. Many persons "in these parts" will pocket their thousands ere the fever abates. Sales have been effected at prices which are calculated to throw a smile of gladness over the countenances of the sellers, and eradicate every wrinkle from the brow of care.—Many will date the beginning of their prosperity from the present time, and sit down, by and by, in ease and competence, and bless their stars that they ever put their hands to the work.—*Centre-ville Sentinel*.

MORUS MULTICAULIS—SILK CULTURE.

The Richmond Enquirer has a long and valuable article on the subjects which head this article, containing numerous excerpts from different writers in relation to Mulberry trees, Cocoons, &c. The Enquirer says:—

"Virginia is not asleep in relation to this new branch of industry. We have heard of large profits being made in the neighborhood of Fredericksburg, Petersburg and of Norfolk; in Caroline county, Brunswick, &c. The profits made by Mr. Hicks of Brunswick, on an outlay of from \$2 to \$300 in the *Morus Multicaulis*, have been already noticed in this paper. It amounted, according to a letter of that gentleman to the Editor of the Farmer's Register, to \$7,500—besides retaining an ample stock for his future productions. We have heard of anecdotes of astonishing profits being made in several places. They are as rife as they are amusing—of little squares in gardens, producing profit enough to amaze the owner—of small spots of ground, which had cost only 5 to 600, turning out in this new species of agriculture, 3 or 4000 dollars—of cute farmers in the North, looking ahead, coming to Virginia, selecting the best soils and situations, sending on their one or two eyed cuttings, and reaping this fall a harvest of several thousand dollars. The *Morus Multicaulis*, and the Silk worm, are now all the go. Forty dollars the thousand for cuttings are offered. Trees are bought at \$25 or more—and some gentlemen in our own City are talking of establishing cocooneries in our vicinity. The subject is certainly worthy of inquiry; and we hope our friend of the Register will go on, to collect information from all quarters, and give us in each No. of his valuable work some statistics upon the subject. Let us remember, that the growth of Cotton itself was at one time as much a novelty in the United States as Silk is at this moment. Both have had their birth and their cradle. Cotton has now obtained a gigantic degree of prosperity, which nothing can arrest. Why may it not be the case with Silk? Our own importations of Silk during 1837, were \$14,351,832. Why may we not only supersede the importation from the east and from Europe, but supply a large portion of the raw material to the rest of the world?"

SHADE TREES.

Be careful not to transplant before the leaves have fallen—as soon after as you please.

The trees should be taken from *open ground*. If taken from the dense forest, they will not bear the exposure.

Select trees of sound growth, they have better tops and better roots than the first.

Transplant the tree entire. The leaves are the lungs of the tree, and affect its growth as much as the roots. The frequent practice of lopping off the top is very bad.

Be sure and get all the roots. Remember the small fibres are what absorb nourishment for the tree. Strip off these, and the main body of the root becomes only a contrivance to hold the tree up. Do not expose the roots to sun and air longer than absolutely necessary. Let them carry with them as much as they can hold on to.

In setting out the trees be careful to make the hole so large that the roots shall not be coiled; neither let them be crowded together, for then they will decay.

Throw upon the roots first fine strong mould, never any manure, then throw on water, and shake the tree till the mud has filled up all the interstices between the roots. After the ground is

somewhat dry fill up the hole and tread down the earth. Never leave a tree so that water can stand over its roots.—*Bath. Const.*

For the Farmer and Gardener.

NORTON'S SEEDLING GRAPE.

Several years ago, when Editor of the American Farmer, I received a large number of specimens of grapes from a gentleman in Pennsylvania for inspection; among them was one marked "Norton's Seedling." My correspondent alluded to that specimen particularly, and requested my opinion of its qualities. I gave my opinion freely, pronouncing the specimen a very inferior grape. My opinion has remained unchanged until a few days since, when Dr. Norton called and presented me a sample of his seedling. This is a very different grape from the one sent me from Pennsylvania, and proves conclusively that my former correspondent had been deceived. The true Norton Seedling, as presented by Dr. Norton, is a remarkably *sugary* grape, of medium sized berry, compact moderate sized bunch; the fruit without pulp, very juicy, thin skin and rich. It is a black grape, covered with bloom. The Doctor states that the vine is a great and never failing bearer; the fruit not subject to rot, and all on the bunch ripening at the same time. It is ripe about the 15th of September, and has kept well till near the 25th October.

I feel it incumbent on me to make this statement, though at this late day, (and should have been equally ready to do so before, had a sample been furnished,) in justice to Dr. Norton, and also with a view of making the grape better known.

The Doctor also presented me samples of the Cunningham Prince Edward, and the Woodson grapes, both excellent fruits; the former a black grape, found wild in Prince Edward County, Va.; the latter reddish purple, and also found wild in Virginia.

[Mr. Smith presented us a bunch of the above Norton's Seedling Grape, which we find answers the above description.—*Editor Farmer and Gardener.*]

To the Editor of the Ohio Farmer—

Sir:—In a late number of your paper, extracted from the Cultivator, I am made to say, "that the male and female blossoms grow on different plants in all other kinds of strawberries except the hautboy." I do not except the hautboy. All the varieties of the hautboy I have seen, have the male organs defective in one set of plants, and the female in the other. Of the hautboy there are numberless varieties, and there may be some kinds that have the male and female organs perfect in the same plant, but I have never seen one. The only kinds in which I have seen them perfect is the white strawberry and alpine monthly. In other kinds I have always found two complete set of plants; the one with the male, and the other with the female organs more defective, and these plants never change their character by running. Both kinds are produced by seed. From the publications of Mr. Keen of England, I should infer, he does not understand the character of his own fine seedling. In his seedling the male organs are so defective, that an acre of plants, separated from

the males of other varieties, would not produce one perfect fruit. This is also true of the Hudson. They are our two largest and finest varieties. Wilmot's superb is a very large strawberry, but is so defective in the female organs that not one blossom in twenty will produce a perfect fruit. I have noticed the wild strawberry in many of the States, and I have never met with any, (the white excepted,) that had the male and female organs perfect in the same blossom. In most, if not all, it amounted to a complete separation of the sexes. No variety of strawberry can be named that produces large fruit, that has the male and female organs perfect in all the blossoms. It is a matter yet unsettled whether all strawberries are of the same species. This I know by experience, there are female strawberry plants that cannot be impregnated by those of the same kind; where they are mere varieties the male of the one will impregnate with the female of the other. I have frequently imported the true large Chili strawberry, but have invariably got plants so defective in the female organs, that not one blossom in fifty produced a perfect fruit. I have in raising seedling strawberries once, and once only, seen a plant that had two sets of blossoms on the same plant. The one blossom entirely defective in the male organ and the other in the female.

Our native grapes are now ripening, and it is desirable that every friend of his country should examine the varieties growing in his vicinity. If this were done we should soon cease to regret the want of success in cultivating the foreign grape in the United States. I have two varieties of the native grape entirely free from the hard pulp common to most native grapes. As a table grape they are equal to the Burgundy, and the branches three times the size. For one of them I am indebted to an unknown hand; the vine is of vigorous growth, entirely hardy, and the branches are from 8 to 12 inches in length. I shall be pleased to receive a communication through the post office from any part of the United States from any gentleman finding a superior native grape in his vicinity.

Twenty-five years since in the neighborhood of the present site of Columbus I saw a haw, equal in size to the crab alley, of the same shape, of a beautiful crimson color, and of so fine a flavour that I supposed it an apple. I should be pleased to hear from any person knowing where the same kind is now to be found. On examining the tree I found it the genuine haw, but the leaves were double the size of the haw common through the State.

N. LONGWORTH.

Cincinnati, Sept. 16, 1838.

We request the attention of our horticultural friends to the above communication of our esteemed correspondent. Mr. Longworth, by his persevering patience and his scientific arrangement, has done more perhaps than any other individual in this country to make us acquainted with the physiology of the strawberry, its habits, and its value as a garden fruit. By a proper attention to the rules heretofore laid down by him in the propagation of this fruit, so grateful to our palates, no one can fail to have an abundance of fruit, while to neglect them will ensure ultimately want of success. The former communications of Mr. Longworth on this interesting subject have either appeared originally in this paper, or have been copied into it,

and may be found by reference to our past pages.

We hope that all persons possessing useful information on the subject of the native grapes of this country, or any of our neighbors familiar with the variety of haw described by Mr. Longworth, will communicate with him relative to them with little delay. Mr. L. has, we suppose, done as much, and perhaps more, to introduce the grape culture and the manufacture of wine into the United States than any other individual in our country. His exertions after many years of persevering experiments, have been crowned with the most signal success. The wines produced by him from the grapes of this country have been pronounced by good judges equal to the best qualities of the Madeira vintage, or of the famed wines of Burgundy. Mr. L., we are assured, has tried every variety of foreign grapes to test their adaptability to our climate, but is satisfied that however desirable it might be for us to acclimate many of these varieties, we already possess many kinds fully equal to those of Europe, and that with due care and attention in improving those varieties, we may soon become a wine producing people. For ourselves we should be well pleased to see this time arrive. We should look upon it as an era in the history of our nation, of which every patriot might well be proud. Cannot some plan be adopted by which this event may be accelerated? Would not the establishment of a State Agricultural Society, having general objects in view, and paying special attention to every branch of rural industry, affect this object? For ourselves, much as we admire to see the improvement of any one branch of agriculture, we do not like to see others neglected or overlooked. Cattle husbandry, we admit, is of the highest importance to a large portion of our farmers; we are therefore glad to see it encouraged by liberal premiums; but as we consider horticulture of like importance, we equally regret to see it passed by without a passing notice by the members of a society who profess to represent the interests of a whole State. The same remarks are applicable to the dairy and the whole range of rural industry. Can it be that the Ohio State Agricultural Society is *local* in its character, and *special* in its objects, or does it in fact represent the general interests of our people? We hope for a reply.—*Editor Ohio Farmer.*

From the Horticultural Register.

ON THE USE OF CAMPHOR IN HORTICULTURE.

Camphor is dissolved in alcohol until the latter is saturated; the alcohol is then put into soft water, in the proportion of two drops to half an ounce. Withered, or apparently dead plants, put into this liquid, and allowed to remain there from two to four hours, will revive, if they have not been completely dead before being put in.

On the propagation of vines.

Cuttings are made from one and a half feet to two feet in length, and all the buds removed from them except one at the upper extremity. The shoot is then laid in the soil, to the depth of six inches, the end having the bud being brought up to the surface. A vigorous shoot is made in the first year; and in the second year the plants, if not removed, will bear fruit.

On the preservation of Grapes and Plums.

At Berlin, grapes are preserved by cutting the

bunch when ripe, with about one foot of the wood, above and below the footstalk. The ends of the wood are dipped in hot pitch, to keep in the moisture, and the bunch is then hung up in a dry place. The Quetch plum is preserved till March by the following method:—"Gather them when perfectly ripe and dry; put them in a glass jar or bottle, closely tied up, and pitched so as to exclude the air, and then bury them in dry soil seven or eight feet deep, so as to be out of the reach of any change in temperature or moisture. When taken out they must be used immediately.

On Shortening the Tap Roots of Trees.

The following principles are laid down:

1. An injury to any one part of a plant occasions a change in the natural development of the other parts.

2. Roots and stems are always in a certain degree reciprocally proportionate to each other.

3. The tap root does not form a part of every plant; but, where it does so, it is an essential part of that plant.

4. By shortening the tap root, one or other of the following consequences will result: Tender plants will be more easily destroyed by severe weather; all sorts of plants by dry weather, from their roots not being so deep in the soil: the wood of the timber trees will be less durable, their trunks shorter, and their heads broader and less high; and fruit trees will blossom earlier and more abundantly, and their fruit will be larger and better flavoured.

5. To transplant trees without injuring their roots, is difficult in proportion to the age of the tree, and the extent of the roots.

6. All transplanting ought to be done when the trees are young, and then only can the roots be cut without injury.

7. When the tap root descends into a bad subsoil, it brings on diseases in the tree.

The general conclusion which the writer draws, is, that where the largest and best timber trees are an object, the seeds should be sown where the plants are to remain, and, consequently, the tap root never injured; but that, in fruit trees, it should always be shortened, to cause them to spread out horizontal roots near the surface, among the nutritive soil.—*Transactions of the Prussian Gardening Society.*

SUGAR BEET AND MULBERRY CULTURE.

In order to gratify the many inquiries which have been made of us, we subjoin a copy of a letter which we addressed on the 26th of March last to the Committee on Agriculture of the U. S. House of Representatives, in answer to certain queries propounded to us by that body. As subsequent experience has convinced us of the propriety of the views therein taken, we give it with renewed confidence.

MULBERRY GROVE,

Baltimore County, Md., March 26th, 1838.

SIR: Your favor of the 24th instant, through Mr. Yorke, enclosing a circular containing certain inquiries relative to "the culture of the mulberry and sugar-beet, or either of them," reached me this morning; and as the committee, of which you

are a member, require a prompt answer, I lose no time in replying to your several inquiries, and for perspicuity's sake shall do so in the order in which they are put.

"1. Are you acquainted with the culture of the mulberry and the sugar-beet, or either of them?"

I am acquainted with the culture of both. I am extensively engaged in the culture of the mulberry, the *Morus multicaulis*, and have given several years' close attention to the silk culture generally, having been early convinced that, of every branch of human industry, it is, perhaps, the best calculated to promote the happiness, increase the comfort of, and render our people prosperous; that, of all others, it is best suited to the peculiar condition of larger portions of the soil of the old States, and to impart appreciation to those countless fields which by improvident tillage have been rendered comparatively valueless.

The sugar-beet I have successfully cultivated, not with the view of sugar-making, but as a vegetable for my table and as food for my cattle; and I feel justified from my experience in saying, that of all the varieties of the beet family, it is the best for the first purpose, being, from the great quantity of saccharine matter it contains, and the total absence of that earthy flavor peculiar to most beets, infinitely more acceptable to the generality of palates than any other. Indeed, as a table-beet, so superior is it to all others, that I should never think of growing any others. As food for cattle and hogs, when the acreable product of nutritive matter is taken into the account, I believe it will be found to afford as much, if not more, substantial food than any other of the root family, and I am very certain that there is no other kind that such animals eat with more avidity, or on which they thrive better. For milch cows, when fed through the winter, in the proportion of from half a bushel to a bushel a day, in addition to their usual allowance of fodder or hay, I know of no food that I think equal to them. From their succulence, and the great quantity of saccharine matter they contain, they not only tend to increase the secretion of milk, but add immensely to its richness, and consequently to the quantity and quality of the cream. Cows thus treated will not only be found to be kept in good condition, but to generously contribute towards the emolument of the dairy. Horses, too, with the addition of a small portion of meal of any kind, or some one of the mill-stuffs, may be kept well through the winter to their work on three pecks a day. To render them acceptable to these latter animals, at first salt should be freely sprinkled over them; by pursuing this course for a short time, they will become fond of their flavor and will eat them with readiness.

Product. The beet, like the other roots, feed deeply, and require plenty of manure—say 20 double cart-loads of barn-yard or stable manure to the acre. But then they liberally reward the husbandman for his expense and labor, for in a suitable soil and good culture, an acre may reasonably be calculated to yield 1,000 bushels. This I should think a moderate product, as beets averaging three pounds, standing one foot apart, and two feet in the rows, would give an acreable product of 1,089 bushels. I say this would be a moderate product, because I have seen beets, of the sugar-beet variety, weighing 18 pounds, and have

seen it well attested that those of 22 pounds weight have been grown. On good land, under a system of generous manuring and cleanly culture, I maintain that the average of a crop may be made to reach 6 pounds per root, and this would give us the average acreable product of 2,178 bushels. It may not be amiss to state here, that the sugar-beet, like the mangel wurtzel, may, without materially affecting the growth of the root, be stripped of its leaves from July till time for harvesting it; by which a very large quantity of highly nutritious provender may be obtained at that season of the year when, from the influence of the summer's sun, our pastures afford but a scanty supply.

"2. What kind of soil, and what situation and exposure, are the best for the production?"

For the mulberry, a sandy, sandy loam, or gravelly loam, are the soils best adapted to its production; and it will be still better if the subsoil be of the same description, so as to afford facility for the penetration and consequent vigorous growth of the roots. A high situation should always be selected, and particularly for that variety of the mulberry known as the Chinese or *Morus multicaulis*. On such situations the wood ripens better, and, as is known, the frosts do not there affect them so much as in low situations: first, because there is a difference of at least 14 degrees in favor of the former in winter over the latter, and secondly, because there is less moisture on elevated grounds than in intervals.

I prefer a southern exposure for the mulberry, and it would be better if that could be protected from the northwest; but the mulberry will thrive in any exposure, provided it be sufficiently high and dry, with suitable soil.

For the beet, as for all other roots, a deep, loamy, generous soil is best. Bottom-lands of virgin richness, or such as have not been exhausted by bad culture, are the best suited to their growth.

"3. What species of mulberry is the most valuable, taking into consideration the capability of enduring cold and frost, the quantity and quality of the foliage, and the labor of culture and stripping?"

I consider the *Morus multicaulis*, beyond all comparison, the "most valuable" species of mulberry known, "taking into consideration the capability of enduring cold and frost;" for I hold it, that wherever it can be planted where the season is sufficiently long to ripen its wood, there is no danger either from cold or frost. Like all other shrubs or trees, all the wood it may make that is not ripened will be frosted off, whether the winter be mild or severe. But if the wood have sufficient time to harden before the frost sets in, there is no possible danger of injury. Five months' growth of the wood, unvisited by frost, will, I believe, place it out of harm's way. In the winter of 1836, I had a number of trees which had been planted from cuttings on the 15th of April, that remained out all that winter, (and it was one peculiarly trying to young trees, being distinguished for its alternations of heat and cold, of freezings and thawings;) these passed through the winter unscathed, through I lost at least 70,000 one-year-old plants of the *Morus alba*. It may be proper here to remark, that I purposely planted the *Morus multicaulis* on the declension of a hill facing the north, exposed alike to the east and west, with a

view of testing their ability, under severe exposure, to resist cold and frost. I was led to the adoption of this experiment with a view of satisfying myself of their adaptation to the varied vicissitudes of our climate, having made up my mind that if they would not withstand the rigors of our winters, however valuable their foliage might be, they would be unsuited to the wants of the culturists of our country. I have trees standing on an elevated position, exposed to the north and west, which have remained out all the winter, whose wood is now as sound as it was last autumn. These trees are the product of roots now two years old, the wood all of last season's growth.

In going through a patch of two acres a few days since, whereon I grew mulberries last season, I discovered a number of small trees, which, after having been taken up by my hands, were left on the ground, where they remained exposed all the winter, without the least covering. These trees, wood and roots, were, to my surprise, uninjured by the cold and frost; thus showing that where the wood is ripened, they are in their nature indestructible. I mention these facts, because they appear to me to be of a character calculated to throw important light upon the subject.

The "quantity and quality of the foliage" come next in the order of your inquiries, and involve questions of deep moment, as affecting, first, the *profit* of the culture; and, secondly, the *quality* of the silk. A full grown *white mulberry*, say of twenty years of age, will afford foliage for five thousand worms; and, as one hundred and eight such trees will stand on an acre, the acre will produce foliage enough for five hundred and forty thousand worms. If, however, the acre be planted in the *Morus multicaulis*, in the hedge form—say, the rows six feet apart, the plants two feet asunder in the rows—it will give us three thousand six hundred and thirty trees on an acre. Each of these trees, if not robbed of their limbs, and properly cultivated, at the expiration of three years, would yield, during the feeding season, fifteen pounds of foliage; making an aggregate of forty-four thousand four hundred and fifty pounds to the acre; and I think it fair to infer that, at the age of four years, the average per tree would be, during the same time, sixteen pounds. Taking these data as correct, the acre would produce an aggregate of foliage of fifty-eight thousand and eighty pounds. Now, then, as fifty pounds of leaves will feed one thousand worms during the *entire feeding season*, so will the acreable product feed one million one hundred and sixty-one thousand six hundred worms. But if we assume one million worms as the number that an acre is competent to sustain, (which I think within the range of moderation,) we shall be able, in the proper place, to arrive at the *profit*, which seems to be desired by the terminating clause of the question. Before I proceed farther, it may be proper to dismiss the inquiry with respect to the "*quality*" of the *Morus multicaulis*; and I will do it in brief phrase. I consider its foliage equal to that of the very best *white Italian mulberry*. Many persons consider it superior, but, so far as mere *quality* is concerned, I do not; for I hold it, that the leaves of the *white Italian mulberry* will make as good silk as it, and better than any other variety. The *Morus multicaulis* leaves, however, possess advantages over it, being nine or ten times larger, and, con-

sequently, lessening the expense of gathering and feeding in that ratio, which fact alone should preponderate over every other consideration.

To return to the "quantity," and the "labor of culture and stripping." The labor of culture is not greater than that of a crop of corn, or of that of roots of any kind. This brings me to the consideration of the fourth question, which is:

"4th. What is the best mode of cultivating the mulberry; at what age may it be stripped; and what is its value, expense, and profit per acre?"

The ground destined for the culture of the mulberry should be thoroughly and deeply ploughed and pulverized. These things are necessary, be the species or variety of the mulberry whatsoever it may. If it be proposed to sow the *white Italian mulberry*, the seed-bed should be well manured with barn-yard or stable manure and ashes, well raked, so as to make it fine; then the seed should be sown as thinly as possible, in drills, two feet apart. The mystery of the after-culture consists in keeping the bed *clean* of weeds, and the earth well stirred, from the time of planting until August. Should long-continued droughts occur, the young plants should be watered of an evening—say twice a week.

The culture of the *Morus multicaulis*. This species of the mulberry should only be cultivated from the tree, and the cuttings. Though a distinct species, and competent to perpetuate itself by its seed, in consequence of the fewness of the seed it yields, and the slowness of the growth of the plant from the seed, it would be an act of folly to attempt its propagation by such means. Indeed, if the seed were ever so plenty, the last objection to their propagation from them should prevail; as it has been conclusively demonstrated that, while it would take five or six years to obtain a tree from the seed of *tolerable size*, one from the cuttings may be obtained the first year from five to six feet high.

The method of propagating from the cuttings is simple. Each bud on wood of one year's growth will produce a tree. Let a cut be made obliquely on the slip, about the fourth of an inch *below the bud*; then take off a similar slice on the corresponding side of the cutting; then insert the cutting so as to just leave the *tip-end** of the bud out of the ground. If planted in the open field, and dry weather should intervene, the cuttings should be watered until they strike, and even after that, until rain occurs. In inserting the cutting, the planter should have a stick or trowel, with which he should make the *hole*; then placing the cutting in, with an inclination of 45° to the north, the *bud* facing the *south*, he should draw the earth around the cutting, gently pressing it with the fingers of one hand, while he holds it in its angular position with the other. It would be better, if in open culture, that straw or leaves be placed along the rows, confined by brush wood or billets, to maintain moisture until the slips strike. Prior to planting, the ground should be well manured, in order that the plants may get an early start and vigorous growth.

The object of giving the cutting an angular position is to enable the bud to send out a *straight limb*, as that limb forms the body of the tree.

* Subsequent experience convince me, that it is best to cover the bud about the fourth of an inch.

The safest way of propagating from cutting is to set them in a *hot-bed*, which is easily made.

The *Morus alba*, or *white Italian mulberry*, may be stripped at from 4 to 6 years old. The *Morus multicaulis* may, to a limited extent, be stripped the *first year* after planting; and without restraint the second year, except so far as to preserve the leaves on the topmost points of the limbs.

The next question involved by the culture is the subsequent management of the trees. Once planted, nothing remains but to keep the ground well stirred, and clean of weeds, from early spring until the first of August, when all working should cease, so as to give the wood, then formed, time to *ripen*. The same workings which a thrifty planter would give to his corn-field, or patch of potatoes, will answer for mulberries.

In order, then, to show, agreeably to the last clause of your fourth query,—viz: "What is the value, expense, and profit per acre?"—I will make a calculation, based on the experience of Europe as well as of this country; and, as the items named in the statement may not be understood, I will precede it by a few explanatory observations:

From minute observation, it has been ascertained that one thousand silk-worms consume, during the entire feeding season, fifty pounds of leaves: experience has proved that three thousand cocoons will make one pound of silk; and I have assumed as a fact that an acre of *Morus multicaulis* will supply one million of worms with foliage; then, as three thousand worms will make one pound of silk, so will one million make three hundred and thirty-three and one-third pounds. As the great size of the *Morus multicaulis* leaf (being from nine to twelve inches either way) has reduced the quantity of labor in the proportion of eighty or ninety per cent. for gatherers and feeders, much fewer hands are now required than when fed from the *white mulberry*, the leaves of which are not more than ten per cent. of the size of the *Morus multicaulis*.

The following is a calculation of the profits of one acre in the silk culture—the cocoons made into *raw silk*.

(To be Continued.)

Jersey Products—The *Mount Holly, N.J. Herald*, says: "Mr. Joseph White, of this town, from one vine, raised twelve of the large species of pumpkins, the weight of which amounts to 782 pounds. The largest weighs 148, and the next 130. The seed was planted in a garden without the hill being manured. In the same garden Mr. W. has a *morus multicaulis* tree, of this year's growth, that measures 4 3-4 inches in circumference, is 9 feet 1 inch high, and with side wood measures 67 feet. Who can beat this? George Haywood, Esq. has also raised from one seed upwards of 400 lbs. of pumpkins."

Sheep Worm—There is a fly that deposits its eggs in the nostrils of sheep, usually in August and September, where it hatches, and then makes its way up into the head and often causes death. The frequent application of tar to the nose of sheep, is considered the best preventive. Put tar on boards and strew on salt, and the sheep will smear their noses with tar in eating the salt. The following method is recommended by some sheep

master: Take a small log, dress it a little upon the upper side, bore holes into it with a large augur at short intervals, about two or three inches deep, fill those holes with salt, and with a brush apply tar as often as once a week around the holes and give the sheep; it is considered conducive to their health. Alexander Reed, esq. of Washington co. Pa. observes: "we have long been satisfied that the use of tar as a medicine or condiment for sheep has not been duly appreciated—The cough and foul nose, I am disposed to think, are both produced from the same disease. When we notice them we lose no time in removing them from the flock, and make free use of tar. It rarely fails to effect a cure in a few days, unless the animal is old or unsound."—*Yankee Farmer.*

Rohan Potatoes—One of the most interesting things at the cattle show last week, was the mighty products from a few Rohan Potatoes. It is a new species, very large, excellent in quality, and productive beyond all other potatoes. One potato presented by Mr. Colman last year to Mr. W. Clark, jr. of this town, was planted by him, and the product this fall is *two and a quarter* bushels! Mr. Charles Nichols, from one peck of the same kind, has raised this year *sixteen and a half bushels*! Mr. Roswell Hubbard also raised four pounds of the Rohannas 18 bushels, which weighed 1173 pounds! Such productions exceed any thing of the kind ever before known in these parts." We are glad to notice that a large quantity of the potatoes for seed were distributed gratuitously among the farmers of the county.—*Northampton Cour.*

Spinning Flax by machinery—A gentleman in New Jersey thinks he has accomplished the end so long and so laboriously sought for, of bringing flax into a condition to be spun like cotton. We have seen samples of the flax in its nine or ten different stages, until it is reduced to a short staple material very much resembling cotton. We have also seen thread, spun from flax so prepared on common cotton machinery, and it appeared well. The inventor thinks he can produce linens as cheap as cottons. The whole process, beginning with the flax in stalk, is performed without water-rotting, and occupies but a day or two. If there is no mistake about the matter, and we do not perceive any, the invention approximates towards Whitney's cotton-gin in importance.

MULBERRY TREES.

THE subscriber has several thousand prime MULBERRY TREES, for sale; warranted genuine, and of good growth, will be sold by the foot or single tree, to be delivered this fall.

Letters, POST PAID, enquiring price, &c. will be addressed to the subscriber at Centreville, Queen Anne's county, Eastern Shore, Md.

J. B. SPENCER.

Sept. 22.

SPRING CLOVER SEED,

Just received and for sale, by

R. SINCLAIR, Jr. & CO.

oct. 16

3

A BOAR AND SOW FOR SALE.

The subscriber is authorised to sell a boar and sow, half Berkshire; the boar is large of his age, being 18 months old, the sow 12 months old, and in pig by the boar; they are both fine animals, and will be sold for \$25. Apply to

oc 2 4t

ED. P. ROBERTS.

GENUINE BARNITZ PIGS.

The subscriber has for sale the following pigs, which are warranted genuine:

2 pair 4 months old, and
1 pair 10 weeks old.

The Barnitz hogs are distinguished for their early maturity and size, attaining upon clover pasture from 250 to 300 lbs. when 12 and 15 months old. The price of the largest size is \$15 a pair; that of the smallest \$10 a pair.

Applications by letter to be POST PAID.

EDWARD P. ROBERTS,

oc 30

Baltimore, Md.

FOUR DEVON BULLS FOR SALE.

The subscriber has for sale 4 North Devon Bulls, of the purest blood in this country or Europe, having proceeded from the stock of the *Earl of Leicester*, a gentleman better and more advantageously known as Mr. Coke of Holkam, who before endowed with title by the present Queen of England, was by universal acclamation designated as the *Great Commoner of England*—and it has been universally conceded that one so illustrious by his acts could not be ennobled by the addition of a title.

The subscriber, without indulging in exaggerated praise, can conscientiously say, that he never beheld four more beautiful animals, and he, therefore, takes peculiar pleasure in recommending them to such gentlemen as may wish to improve their stock by a cross with this time honored race of British Cattle.

The North Devons are no less remarkable for their docility of disposition, than they are for their propensity to take on fat, and the richness of their milk. The Devon ox, as all know, are distinguished for the rapidity and elasticity of their step, as well as for their capacity to endure fatigue. As oxen, therefore, there is no other race that can compare with them.

The above bulls will be sold for 80 and \$100 each—they are 3 and 4 years old. Terms cash on delivery in Baltimore.

Applications by letter to be post paid.

EDWARD P. ROBERTS,

Editor Farmer Gardener,

o 30

Baltimore, Md.

CHINESE MULBERRY TREES.

American Silk Agency, No. 5, Bank street, Philadelphia.

The subscriber having opened a permanent Agency for the purchase and sale of all articles connected with the culture and manufacture of Silk in the United States, offers for sale all the different varieties of MULBERRY TREES, suitable for raising the SILK WORM; viz: *Morus Multicaulis Alpines*, *Brussa Multicaulis Seedlings*, *Morus Expansa*, *Multicaulis Cuttings*, *Improved Italian Trees*, &c. Also, *Cuttings from Norton's Virginia Seedlings*, and *Cunningham's Prince Edward GRAPE VINES*. These vines produce an abundant crop of fruit, warranted not to rot or mildew and are fine for the table, and capable of yielding the finest wines.

S. C. CLEVELAND, Agent.

Those who may wish to enter into this profitable branch of national industry, will do well to call at the Agency, and see that they are well instructed in the value of the trees they purchase.

N. B. The particular attention of those engaged in the culture and manufacture of American Silk, whether of trees, Eggs, Cocoons, reeled or manufactured, is called to this agency. The Agent will give every attention to Sales, and prompt remittance of proceeds of any article sent to him. Those who may wish to purchase and enter in this valuable branch of home industry, can obtain from the agent every information, and also such articles as they may want without fear of deception.

oc 9

1f

GROUND PLASTER OF PARIS,

Of superior quality, in bbls. on hand and for sale by

ONA. ELLICOTT & SONS,

may 8 3t

south end of Patterson st.

THE AMERICAN FARMER.

The proprietors of this paper have a few complete sets of this work on hand, which they will dispose of at the reduced price of \$50 a set.

TO THE PUBLIC.

Try the New Agricultural Establishment in Grant-street, next door to Dinsmore and Kyle.

Every article warranted to be first rate. The subscribers, grateful for past favors, take this early opportunity of returning their thanks to their customers and the public in general, and beg leave to inform them that they are now provided with a very extensive stock of newly manufactured AGRICULTURAL IMPLEMENTS, suitable to meet the call of Farmers, Gardeners, Merchants, Captains of vessels, and others, viz: 1000 Ploughs, assorted sizes, from \$4 to \$15 each, comprising of the old common Bar Shear, Winand's Self Sharpener; Woods & Freeborn's patent, all sizes, "Davis," "Sinclair & Moore's" improved Hill Side Ploughs, highly esteemed for turning the furrow down hill, with wrought or cast shears; Wheat Fans, of various sizes and patterns, from \$15 to \$50 each, warranted to separate the garlic from the wheat; Corn Shellers, from \$12 to \$20; Cutting Boxes, from \$7 to \$50 each; Corn and Tobacco Cultivators, large and small; Expanding do., Wheat Cradles warranted to have fingers of the natural growth, and Grass Scythes, &c. &c.; Castings, of all descriptions and patterns, by the lb. or ton, to suit customers, allowing a liberal discount to merchants buying to sell again—all of which will be furnished on the most pleasing terms and every article warranted to be of the best quality, in proportion to the cost price. All orders by mail or otherwise shall be duly attended to with the greatest despatch.

We would particularly call the attention of Country Merchants and others, wishing to purchase agricultural implements to sell again, to the fact, that we will furnish them with articles on better terms than they can be supplied at any other establishment in the city. Our assortment is complete and as varied as that of the most extensive concern in Baltimore.

We have also connected in its operations with the above branch of business a complete assortment of FIELD AND GARDEN SEEDS, kept by Thomas Denny—Also Garden and Farm Tools, of various sorts and of the choicest collection, which will enable our customers to have filled entire all orders in the Agricultural and Seed Departments. mh 26 JOHN T. DURDING & Co.

AGRICULTURAL IMPLEMENTS AND SEED SORE.

THE SUBSCRIBER informs the public that he keeps constantly on hand at his old establishment in Pratt-street, near Hanover, a large assortment of PLOUGHS and Agricultural IMPLEMENTS gen rally, which are too numerous to name in an advertisement, but invites such of the public who are in want of any articles in his line to call, assuring them that his work shall be as well made, of as good materials, and on as reasonable terms as any in the State. His patent Cylindrical Straw Cutters made on his late improved plan are kept at all times on hand, of various sizes and prices, with wood and iron frames—and he challenges its equal in any part of the world. Having an iron foundry attached to my establishment, all orders for Ploughs and Machine castings can be furnished at short notice and on reasonable terms.

In store—Herds and Orchard GRASS SEEDS, of prime quality; also, Landreth's superior GARDEN SEEDS. He is also agent for Mr. Samuel Reeves' Nursery, near Salem, New Jersey, whose fruit trees he can recommend to the public with confidence. Those wishing Trees from that Nursery this fall should hand in their orders immediately.

J. S. EASTMAN.

N. B. On hand, two Threshing Machines, with portable horse powers, that can be highly recommended and warranted equal to any in use.

CONTENTS OF THIS NUMBER.

Gama grass—remarks on the mulberry culture—prices of mulberries—Campbell Co. Agricultural Fair—Chester and Delaware Agricultural Society—uses of lime—an excellent Cow—damage to the crops in N. Carolina—British crops and markets—Rohan potato—American silk—silk culture—mulberries—*morus multicaulis* and the silk culture in Virginia—transparent shade trees—Norton's seedling grape—the Strawberry culture—horticultural items—Letter from the Editor of the Farmer & Gardener to the Committee on Agriculture in the house of representatives of the U.S.—Jersey products—sheep worm—rohan potatoes—spinning flax by machinery—advertisements—prices current.

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every Monday

	PER	FROM	TO
BEANS, white field,.....	bushel.	1 25	
CATTLE, on the hoof,	100lbs	7 25	8 00
CORN, yellow	bushel	90	
White.....	"	85	
COTTON, Virginia.....	pound	9	11
North Carolina.....	"	9 1/2	11
Upland.....	"	9 1/2	11
Louisiana ——— Alabama	"	11 1/2	12
FEATHERS,	pound.	45	50
FLAXSEED,	bushel.	1 12	
FLOUR & MEAL—Best wh. wh't fam.	barrel.	10 00	10 50
Do. do. baker's.....	"		
SuperHow. st. from stores	"	7 75	7 87
" wagon price,	"	7 62	7 75
City Mills, super.....	"		
" extra.....	"		
Sasquehanna.....	"		
Rye.....	"	5 50	
Kiln-dried Meal, in hhd.	hhd.	19 00	
do. in bbls.	bbl.	4 00	
GRASS SEEDS, wholes. red Clover,	bushel.		
Kentucky blue.....	"		
Timothy (herds of the north)	"		
Orchard.....	"	2 00	2 50
Tall meadow Oat.....	"		3 00
Herds, or red top.....	"	90	1 00
HAY, in bulk.....	ton.	12 00	16 00
HEMP, country, dew rotted.....	pound.	6	7
" water rotted.....	"	7	
HOGS, on the hoof.....	100lb.	8 00	8 50
Slaughtered.....	"		
HOPS—first sort.....	pound.	9	
second.....	"	7	
refuse.....	"	5	
LIME,	bushel.	32	33
MUSTARD SEED, Domestic, —; blk.	"	3 50	4 00
OATS,	"	40	
PEAS, red eye.....	bushel.		1 12
Black eye.....	"	1 00	1 12
Lady.....	"		
PLASTER PARIS, in the stone, cargo,	ton.	4 00	
Ground.....	barrel.	1 50	
PALMA CHRISTA BEAN.....	bushel.		
RAGS,	pound.	3	4
RYE,	bushel.	90	95
Susquehanna.....	"		none
TOBACCO, crop, common.....	100lbs	4 00	4 50
" brown and red.....	"	4 00	6 00
" fine red.....	"	8 00	10 00
" wraperry, suitable	"		
for segars.....	"	10 00	20 00
" yellow and red.....	"	8 00	10 00
" good yellow.....	"	8 00	12 00
" fine yellow.....	"	12 00	16 00
Seconds, as in quality.....	"	6 00	
" ground leaf.....	"	5 00	8 00
Virginia.....	"	4 50	6 00
Rappahannock.....	"		
Kentucky.....	"	5 00	8 00
WHEAT, white.....	bushel.		
Red, best.....	"	1 70	1 73
Maryland.....	"	1 70	1 72
WHISKEY, 1st pf. in bbls.....	gallon.	45	45 1/2
" in hhd.....	"	43 1/2	
" wagon price.....	"		
WAGON FREIGHTS, to Pittsburgh.....	100lbs	2 25	
To Wheeling.....	"	2 50	
WOOL, Prime & Saxon Fleeces.....	pound.	50 to 55	
Full Merino.....	"	45 50	
Three fourths Merino.....	"	40 45	
One half do.....	"	35 40	
Common & one fourth Meri.	"	35 40	
Pulled.....	"	30 33	
POTATOES, 60 to 70 cts. a bushel.			

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES.....	barrel.		
BACON, hams, new, Balt. cured....	pound.	16	17
Shoulders..... do.....	"	14	15
Middlings..... do.....	"	14	15
Assorted, country.....	"	14	15
BUTTER, printed, in lbs. & half lbs.	"	31	37 1/2
Roll.....	"		31 1/2
CIDER.....	barrel.	1 75	2 00
CALVES, three to six weeks old....	each.	5 00	6 00
Cows, new milch.....	"	25 00	40 00
Dry.....	"	12 00	15 00
CORN MEAL, for family use.....	100lbs.	1 75	
CHOP RYE.....	"	1 50	1 60
EGGS.....	dozen.	19 1/2	
FISH, Shad, No. 1, Susquehanna,	barrel.	9 75	10 00
No. 2.....	"	9 50	
Herrings, salted, No. 1.....	"	5 75	
Mackerel, No. 1, ——— No. 2	"	12 50	
No. 3.....	"		7 25
Cod, salted.....	cwt.	3 25	3 37
LARD.....	pound.	14	15

BANK NOTE TABLE.
Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

U. S. Bank,	par	VIRGINIA.
Branch at Baltimore.....	do	Farmers Bank of Virgi. par
Other Branches.....	do	Bank of Virginia..... do
MARYLAND.		Branch at Fredericksburg, do
Banks in Baltimore.....	par	Petersburg..... do
Hagerstown.....	o	Norfolk..... do
Frederick.....	do	Winchester..... do
Westminster.....	do	Lynchburg..... do
Farmers' Bank of Mary'd, do		Danville..... do
Do. payable at Easton.....	do	Bank of Valley, Winch. par
Salisbury..... 1 per ct. dis.		Branch at Romney..... par
Cumberland.....	par	Do. Charlestown..... par
Millington.....	do	Do. Leesburg..... par
DISTRICT.		Wheeling Banks..... 2 1/2
Washington.....		Ohio Banks, generally 3
Georgetown.....	Banks, 1/2 p.c.	New Jersey Banks gen. 3
Alexandria.....		New York City..... par
PENNSYLVANIA.		New York State..... do 1/2
Philadelphia.....	par	Massachusetts..... 1 1/2
Chambersburg.....	1/2	Connecticut..... 1 1/2
Gettysburg.....	do	New Hampshire..... 1 1/2
Pittsburg.....	2 1/2	Maine..... 1 1/2
York.....	2 1/2	Rhode Island..... 1 1/2
Other Pennsylvania Bks. 2		North Carolina..... 3/4
Delaware [under \$5]..... 4		South Carolina..... 4/5
Do. [over \$5]..... 1 1/2		Georgia..... 5/8
Michigan Banks..... 10		New Orleans..... 7/8
Canadian do.....	10	

COMPETITION.



Much has been said lately about the superior growth of the *Morus Multicaulis* in Virginia, and the greater maturity of the wood for cuttings, &c. We now offer to exhibit one, two, three or more thousands of our trees with any plantation of one year's growth of the same kind existing in Maryland or Virginia, and if ours are not superior in the growth of the wood to any other parcel of similar extent, we will pay to the owner of the other parcel 1000 dollars, or one thousand of the trees, he agreeing to a similar forfeit if the reverse is the case. The truth is, their growth is as great in Connecticut and Rhode Island as in Virginia, and trees of 2 and 3 years old are here found to be as hardy as an apple tree.

WM PRINCE & SONS,
oc 23 2t Flushing, New-York.

IMPORTED DURHAM SHORT-HORNS.

The subscriber respectfully gives notice, that Mr. Whitaker's improved Durham Cattle have arrived per the ship Octorara, and that the public sale of this fine stock will positively be held on Monday, the 5th of November next, at 11 o'clock precisely, at Powell n, near Philadelphia.

oc 23 1t C. J. WOLBERT, Auct.

FOR SALE,

A valuable FARM of prime soil, on the Western Run in Baltimore county, about two miles north west of the 14th mile stone of the Baltimore and York turnpike road, and at the same distance from the depot of the Baltimore and Susquehanna rail road, at Cockey's tavern, in a rich, highly cultivated and healthy tract of country.

This farm contains from 260 to 270 acres, having a full proportion in wood, much of which is building timber, peculiarly valuable in that neighborhood; is in the best state of cultivation; a considerable part in productive timothy meadow, and the residue of the stable land, not in grain, is well set in clover, the whole under good fencing, laid off into convenient fields, each of which is well watered. The farm has a large quarry of excellent building stone. There are on the premises an apple orchard of select fruit trees, which seldom fail to bear abundantly; a valuable mill seat on the Western Run, with a race already dug. There is no location in the country more favorable for a grist mill, having the advantage of a rich and thickly settled neighborhood, and a good public road leading thence to the turnpike road. Buildings substantial and convenient, being a **STONE DWELLING**, and kitchen of two stories; a large stone Switzer barn, with cedar roof and extensive stabling below; large hay house and stable for cattle; stone milk house near the dwelling, with a spring of fine never failing water, with other out-houses. On the country road near the mill-seat a good house and shop for a mechanic, under rent to a good tenant. It is well known the lands on the Western Run are in every respect equal, if not superior to any in the county. Adjoining or near are the lands of Col N. Bosley, Daniel Bosley, Thos. Matthews and others. The water power, with about 20 acres of land, is so situated that they may be detached and sold separately, without injury to the rest of the farm for agricultural purposes. Terms of sale will be liberal. Apply to

NATHANIEL CHILDS,
on the premises, or to
WILLIAM J. WARD,
oc 23 1t Fayette, near Calvert st. Baltimore.

SEED WHEAT & RYE.

275 bushels white chaff bearded wheat
200 do red do do
250 do Italian and Tuscany spring do
All the above of superior quality, and selected particularly for seed. o 2 R SINCLAIR, Jr. & CO.

SPLENDID BLOODED STOCK FOR SALE.

The proprietor of Covington farm will dispose of the following fine bulls on reasonable terms, viz.
One bull two and a half years old.
One do. six months old.
of the improved Durham short horn breed; the dam of the first was got by the celebrated bull Bolivar; for size, form and beauty they are not surpassed by any animal in the state.

Three **Devon Bulls**, one of which is seven years old next spring, and the largest Devon in the State. The Devons are from the stock of the late Wm. Patterson, and of undoubted purity.

Two half Devon bulls.
Two bulls half improved Durham short horn, and half Devon.

One splendid bull, a cross of the Bakewell, Alderney and Devon.

One bull, half Alderney and half Holstein.

These fine animals may be seen at Covington farm, near Petersville, Frederick county, Md. on application to James L. Hawkins, Baltimore, or to

se 11 f FREDERICK EBERT, Manager.

PIGS, &c.—IMPROVED BREEDS.

ROBERT SINCLAIR, Jr. & CO.

Light-street, near Pratt-street Wharf,

Offers for Sale

One pair full blooded **BERKSHIRE** pigs.
Three do full do **BERKSHIRE** do
One do **HALLAM** and **BERKSHIRE** do
One do **THIN RHIND** and **BERKSHIRE** do
Three do **BEDFORD** and **BERKSHIRE** do
—ALSO—

15 pair White India Turkeys and Westphalia Geese.
oc 16.

A HALF DURHAM COW FOR SALE.

The subscriber has for sale a beautiful fashionable roan half Durham Cow. She is fresh in milk and only 4 years old. Her price is \$75. Applications, post-paid, to be made to

ED. P. ROBERTS.
Who has also for sale several full bred Devons, males and females.
oc 2 4t

THE FARMER & GARDENER.

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, E. P. ROBERTS AND SAMUEL SANDS—EDITED BY E. P. ROBERTS.

No. 28.

BALTIMORE, MD. NOV. 6, 1838.

Vol. V.

THIS publication is the successor of the late **AMERICAN FARMER** and is published at the office, at the N. W. corner of Baltimore and North streets, over the Patriot office, at two DOLLARS AND FIFTY CENTS per annum, if paid within one month from the time of subscribing, or \$3 if after that time. All letters to be post paid.

BALTIMORE: TUESDAY, NOV. 6, 1838.

GREAT APPROACHING SALE OF STOCK.

In another part of this day's impression, there will be found a notice of a sale of Major Frederick Haines' herd of cattle, to be held at his estate in the vicinity of Marietta, Lancaster county, Pa. on the 15th inst. The stock consists of 46 head of Durhams of various grades, from full bred to halves; among which there are many of superior purity and goodness; and we risk nothing in saying, that any gentleman who may wish to purchase, will find it his interest to attend this sale, as from our knowledge of the laudable ambition of Major Haines to excel in his stock, and of the character of his stock also, we are sure there are few, if any herds in the country offering better chances of selection. Of *Bos* we will remark, that there is no improved short-horn Durham in the country whose lineage is more highly approved; or whose strain has done more than his to give character to this justly boasted pride of Britain's stock of cattle.

But while we speak of *Bos*, let us not forget *Flora*, the queen of cows, who, while the property of the Hon. Charles A. Barnitz, of York, Pa. by whom she was bred, yielded 20 lbs. of butter a week, while fresh in milk, and was very appropriately called his "*butter cow*," in contradistinction to the many other noble animals which he owned. The quantity of butter yielded by this extraordinary animal, will, perhaps, appear large to those who may have formed their opinions from the product of ordinary cows; but as to the truth of the fact we have no doubt, having received a written account of it from Mr. Barnitz a few years since, and while she was his property—Some idea may be formed of the butteraceous quality of the *cream* when we state the fact, that butter can be formed from it in a few seconds by simply beating it with a spoon in a bowl.

We would respectfully call the attention of our readers to these facts: Among the issue of *Flora*,

we notice there are *two heifers*—one a yearling by *Bos*, the other a calf by *Junata*—he by *Emperor*, the most distinguished of his race in this country for size; nor should we omit to mention also, that, among his half-blooded cows, there are several which, when fresh, give from *four to five* gallons of milk daily.

We sincerely regret to learn that Major Haines is compelled to abandon the business of a breeder, by a most painful and long continued indisposition, as but few individuals are better qualified by habits of industry and perseverance, the possession of that happy combination of a well matured judgment, and a passionate devotion to its interests, to excel in the occupation; and while we regret the cause of the retirement of one so eminently suited to an intelligent, and therefore successful prosecution of the business, we may be permitted to mingle with our *regrets*, that more pleasing emotion, arising from the *hope*, that a relaxation of his mind from temporal cares, change of location, and the excitement of travel, may speedily restore him to good health, that peerless gift of God to man, which lends to enjoyment its zest, and imparts to pleasure its charms.

Norton's Seedling Grape—By some accident or other inexplicable to ourself, in giving Mr. G. B. Smith's communication on the subject of his changed views in relation to the character of Dr. Norton's seedling grape, we omitted his *signature*. To obviate any improper inferences that might be drawn from that omission, we insert the communication *again* to-day—and while we do so, seize the occasion to state, that the grapes for table use are of excellent quality, being free from pulp, of fine flavor, and that from the large quantity and richness of the juice, we have no doubt that for wine making, it will be found equally good.

Dr. Norton deserves great credit for the introduction of this new variety into the family of American grapes, and we trust it may prove a source of profit to himself and family.

Rohan Potatoes—We examined a lot of these potatoes, which Mr. Gideon B. Smith has for sale, and were highly pleased at their appearance, and bought a small parcel for planting next year, when we hope to be able to give a favorable account of

them. To try their edible qualities, we roasted one, which with the addition of good butter, pepper and salt, proved a most acceptable treat to our palate, and we can, therefore, conscientiously recommend them as good for the table.

Feeding of Cattle—As the pastures are now very scant, farmers will find it to their interest to feed their stock, lightly, night and morning, so as to prevent their losing flesh, as it is much easier to keep a cow up to her condition, when in good order, than to arrest a downward course after it has commenced, or to get her up again when once reduced in flesh. As the pastures give way, the foddering should be moderately increased until the hard weather sets in, when the cattle receive the usual winter allowance; but whatever that may be, it would be better to dole it out three times than twice a day, as by thus dividing it, they will eat it with better appetite, and comparatively speaking, but little provender will be thus lost.

Berkshire Pigs—On Friday last we forwarded to Major Abraham Barnes, of Washington county, Md. five well grown pigs of the above breed, which had come to our care for that gentleman from Col. C. N. Bement, near Albany, New York. These pigs were three and four months old, and, as may have been expected from such a quarter, were in fine condition. It is not our purpose to speak of the superior excellence of this favorite English breed, as every one acquainted with them know, that they are remarkable for the smallness of their bones, shortness and symmetry of their legs; length and barrel-like shape of their bodies; delicacy of their heads and ears, and, generally, giving to the hams and middlings, those parts where it should lie, the most meat, and that so delightfully mixed up of fat and lean, as to present the aspect of variegated marble. They know, too, that early maturity and easy keep, are their characteristic traits of character.

The noble example, which Major Barnes has thus set his neighbors, will not, we are certain, be lost upon so intelligent a people as those of Washington county; for superadded to the motive of public spirit, they have that of interest to stimulate them onward in the footsteps of one, who, as an agriculturist of liberal and comprehensive mind,

aims by every means within his power, to elevate the calling of his choice, develop the resources of husbandry, increase the products of the soil, economise time and labor, improve the breeds of domestic animals, and thus, in the most substantial manner, promote the happiness of his kind.

"*The Farmer's Guide*."—Under this title, Mr. Gaskins, late proprietor of the Virginia House, Pratt street, Baltimore, has published a neat volume on agriculture, in which he advances certain principles of a novel character, and assumes for his work the merit of its being the herald of a new system of husbandry. He maintains that, by following the course he has laid down, manure is not absolutely essential to the cultivation and improvement of the earth. He goes upon the plan, that, by keeping the ground principally in clover and timothy, sufficient improvement will be effected to secure good crops; he is averse to ploughing the ground in autumn, and exposing it to the influence of frosts, as he conceives that, by such exposure, a great loss by the escape of nitre ensues. In putting in the winter crops of grain, he recommends that buckwheat be sown on it, for the two-fold purpose, of keeping the wheat and rye warm throughout winter, and of preventing that nitrous evaporation, which he considers detrimental to the soil. He states that the fall grain should be gotten in in all September, and the early part of October, and affirms that by the time the frosts are sufficiently severe to cut down the buckwheat, it will have attained a height of 18 inches, and thus afford not only a warm covering for the grain, protection to the earth, but, by its decomposition the ensuing spring, give out a vast quantity of food for the growing grain plants. We hesitate not to say, that if the grain and buckwheat were put in earlier, that is, in the beginning of September, that much more benefit would accrue to the grain crops, than if delayed to the latest period named by Mr. Gaskins; nay, we think his suggestion of sowing the buckwheat a good one; but we object to the delay of putting in the seed as late as October, if the object be benefit from the covering of buckwheat.

We have thus cursorily alluded to this part of his work, and although we are not one of those who believe it practicable to successfully cultivate the soil without manure, we are free to confess that there are many suggestions in his book which we esteem as valuable, and believe that any farmer who may purchase it, will find something in it by which he may profit, and, therefore, commend it to the favorable notice of all.

Mr. Gaskins is too good a farmer not to know that to produce a healthful covering of either clover or timothy, it is necessary that the soil be in good condition, and, we, of course, presume that he presupposes such to be the fact before his "new system" will apply. But be this as it may, to us it appears obvious that such must be the condition of any ground on which either of the grasses named by him can be advantageously grown, and hence it necessarily follows, that before any worn-out lands can be rendered available by his plan, a previous preparation by manuring must be had. And we will here remark, that before any such lands can be brought up to a state of fertility equal, or superior to its virgin excellence, if calcareous matter be not present in the soil, that that deficiency must be supplied, as, to a certain extent, that principle must be existent before any very salutary change of a permanent character can take place. We have noted these points, because we believe that all organic changes, of a meliorating character in the productive capacities of the earth, will mainly depend upon carrying out the principle we have suggested. If calcareous matter be not present in the earth, as we have observed, we hold it essential that it be placed there; for without it, alimentary manure will perform but half its beneficent office—with it, its effects will not only be prompt but lasting.

Mr. Gaskins' work treats of agriculture generally, and lays down many rules of great value, to be applied to the growth of various productions of the earth, and in conclusion we would respectfully recommend to all planters and farmers to buy his book, as the most skilful among them will find something by which he may profit, and if he should find views in it which do not accord with his own, still that which he does approve of, will more than compensate him for his expenditure. It should be the business of all to seek information in every quarter whence it is attainable, for human knowledge like physical matter, is but an aggregate of minute atoms. And as Mr. Gaskins was for many years a practical farmer, and speaks from his own experience, it is but fair to presume that that experience has prepared him for the business of a teacher.

The literary character of the book, tho' somewhat ambitious in style, is decidedly respectable; its mechanical execution is good, and we hope that his brother farmers will respond to his endeavors to serve them, by liberally patronising his work.

Silk in Louisiana.—From the New Orleans Bee, we learn a fact as gratifying as it is surprising.

Mr. Covington, in the parish of St. Tammany, has for years cultivated the *Morus Multicaulis* to great extent, and some 10 or 12 planters in that parish alone have together 100,000 trees. The climate and soil are admirable for this culture, and Mr. C. believes silk will soon be a great article of commerce in that State.

THE SILK CULTURIST.

Silk Culture and Mulberry Speculation.—The editorial article on this subject which appears in this number was in type (except the closing postscript) before the reception of the communication of Thomas Hicks, esq. which was published in the preceding number; and the first named article was expected to have been presented, in the proper order of time, before the latter.

It has happened upon several occasions, in this work, that a communication exhibiting errors and mistakes of the writer, has served to bring forth correct and full information on the subject from others better informed. We hope, and have now reason to expect, that such will be the fruit of our remarks on what may be termed (in more than one sense) the mystery of silk culture in this country. We have been seeking, by other means, as well as by the publication of the article referred to, (and its still earlier communication in the proof-sheet) to obtain information on this interesting subject; and we are promised, and hope to receive, in part, before the appearance of this number, from two very intelligent and well-informed correspondents, interesting and valuable information on different branches of this subject.

In the time which has elapsed since the printing of the article referred to, we have heard of circumstances which, if of earlier occurrence, would have varied the details, and some of the inferences, though they serve to confirm the correctness of the general views there presented.—The demand for plants of the Chinese mulberry has indeed so greatly increased at the north, that every plant and cutting now in Virginia, may be sold this year to northern purchasers at the highest prices. To our previous views and recommendations, therefore, we would add the advice to all who have plants to spare, not to sell any to speculators lower than at the highest prices; to raise as many plants as possible in 1839, from the stock retained, and to be prepared then to supply the whole country at greatly reduced prices, and yet at greater profits than the highest prices would give. Every single bud planted next spring, and well taken care of, will produce from 10 to 70 buds—say not less than 30 on an average; and therefore at a half-cent, or even a quarter cent the bud, the stock of 1839 will yield a much greater sum than the present growing stock at 2 cents the bud, or 25 or 30 cents the rooted plant. But whether the sales are made this year at the present high price, or next year at much lower, it is gratifying that the course of trade is so completely turned, and that northern purchasers are now coming to the south for supplies, and that this year more money will thus be paid to Virginia, than all that the northern nurserymen have before got from us for their immature and defective plants, with which this state was stocked.

It is not merely the rage of speculation, stimulated by legislative bounties, that has caused this

great demand at the north. There is a real and great scarcity of *morus multicaulis*, caused by the immens loss of cuttings by the wet and cold weather of last winter and early spring, and the drought of summer.

The following communication to the Petersburg Intelligencer shows that our late correspondent, Mr. Hicks, of Brunswick, has already been well paid (and it was by northern purchasers) for his enterprise. Agents of sundry large dealers and speculators have already gone through lower Virginia, and have engaged (and we fear, generally at half the price they were willing to pay,) all the plants of the *morus multicaulis* they could find for sale.

LAWRENCEVILLE, Aug. 28, 1838.

"I think the public ought to know that Mr. Thomas Hicks, of this county, the year before last, and last year, laid out \$245 in Chinese mulberry trees; and this fall will have for sale 30,000 trees.—Two days ago he sold 20,000 to some gentlemen in Pennsylvania, at 25 cents a tree—the residue he reserves to sell in this vicinity, having realised the handsome sum of \$7,500, from so inconsiderable an outlay, in so short a time. Mr. Hicks expects to have, by this fall twelve months, 150,000 trees more for sale, and in all probability will get nearly twice as much per tree. He has also commenced the past season, making silk, and has succeeded beyond his expectations, demonstrating that our country is congenial to the production of that beautiful and valuable article. Mr. H. deserves the thanks and has the congratulations of the community for his enterprise and success in introducing a new source of revenue and profit to the county."

Having written to Mr. Hicks to know whether this statement was entirely correct, he has stated in reply that the writer had made some mistakes, which he corrects as follows: "The outlay for my plants was \$345 instead of \$245; and the time allotted me to raise the trees is one year more than I have been employed. I never saw a Chinese mulberry tree until last year (summer of 1837.) I think it probable I may be able to plant 200,000 cuttings next spring, instead of 150,000. The balance of the letter is all correct." "If I had not sold the 20,000 trees, they would now bring me \$1000 more than I am to receive."—This letter is dated September 8th, which was 12 days only after the sale had been made.

Since the 20th of August, the agents of at least five different and distant *multicaulis* dealers have visited this place for the purpose of purchasing the plants which are in and near Petersburg.—Most of these agents have come since the first of these lines were written. So rapid and violent has been the rise of the *multicaulis* speculation, that our monthly publication can give but a faint idea of its progress. For the last month, almost daily reports would have been necessary to show the state of the trade, and the extent of the demand. Considering that the northern states are the original seat, and still the principal scene, of this speculation—the great void which still is to fill, throughout both the north and the south, for actual as well as speculative demand—the difficulty with which young *multicaulis* plants are raised in the north, and the far greater vigor in growing and after-value of those raised in Virginia—it will not be more strange than the present state of

things, if very high prices should continue to be maintained through another year. But all prudent holders and planters here ought so to act as to be prepared to meet a great reduction of price. The few persons who are so fortunate as to have many growing plants, of course, will do right to make the most of the present demand for their surplus stock. But with a view to all interests, it will be better to plant the next spring than to sell abroad now; as 8 cents, or even 6 cents the tree, in 1839, will pay a far better profit, than to sell the stock grown in 1838 for four times those prices—which may now be readily obtained. Much money must be brought into Virginia from other states by the mania for this trade; and so far to effect a general spreading of the *multicaulis*, which this mania certainly will, it will produce much benefit to public interests. But when the violent fever shall have subsided, it is to be feared that as great a re-action (or non-action) will follow the unnatural excitement; and that the proper business and regular and good profits of silk culture will be scorned and neglected.*—*Farmer's Register*.

[* We draw a very different conclusion from the premises laid down by the very able editor of the Register. We believe that the silk business proper will receive no injury from the high price of trees, whether the profits go into the hands of mulberry growers or speculators; that the high price of trees, which can only last so long as the supply is insufficient for the demand, will have the tendency to fill the country with the material for feeding the worm; that so long as those prices are maintained very little silk will be made; but that so soon as the country is supplied with trees, that silk making will commence and be followed as a branch of husbandry, because there is no other employment half so lucrative.—*Editor Farmer and Gardener*.]

THE SILK CULTURE.

[CONCLUDED.]

The following are the calculations appended to our letter to the Committee of Congress, omitted last week for want of room.

One acre, in account with the Cultivator.

Dr.	
Interest on an acre of land—say, valued at ten dollars, at 6 per cent,	\$ 0 60
Manure for do.,	20 00
Ploughing and harrowing,	5 00
Wages of one woman for six weeks, at three dollars per month,	4 50
Board for do., at two dollars per week	12 00
Wages of one woman for five weeks, at three dollars per month,	3 75
Board for do., at two dollars per week	10 00
Wages of five children, from seven to ten years of age, for four weeks, at one dollar per week each,	20 00
Board of do., four weeks, at one dollar and fifty cents per week each,	30 00
Expense of reeling silk, say	50 00

Interest on money to build a cocoonery large enough to accommodate one million worms—say cost eight hundred dollars, at 6 per cent.	48 00
Balance, as per contra,	1,129 48½
	\$1,333 33½

Cr.	
By product of one acre of silk converted into raw silk—say 333½ pounds, at four dollars per pound,	\$1,333 33½
	\$1,333 33½

By nett profits, as per contra \$1,129 48½

You will perceive by the above items of expenses that I have not set down any thing as expense for interest on the purchase of trees, and for the following reasons; first, because, from the smallness of the outlay necessary, it is scarcely an object; as owing to the facility of propagating from cuttings, but few trees would be required to make a commencement; and, secondly, the sales from the trees to be multiplied would largely over-balance any outlay at the commencement.

My reasons for charging the services of one woman six weeks, and another five, are these: I believe that, for the first of the six feeding weeks, one woman would be sufficient to attend the designated number of worms; that two would be sufficient for the second week; and that after that period, to the end of the term, the five additional children would be sufficient.

I have taxed the cost of a cocoonery with \$48 interest; whereas, on most farms where a million of worms would be fed, no necessity for the erection of such an edifice would exist, as the barn, tobacco-house, and other out-houses would afford all the accommodations necessary, except the shelvings, &c., which, with economy, could be put up for a very small amount, and, by care in after-keeping, would last for many years.

I have not charged any thing for the services of a superintendent, because I hold it that every one should be his own superintendent; and, that by systematically arranging his time, or that of his manager, the superintendence need not be an extra tax upon his pocket.

I have put down 3,900 cocoons as making one pound of silk; but if the cocoons be large, a less number by one-sixth, of cocoons will make that quantity of silk.

I have only credited the acre with one crop of silk, whereas two may be made if the eggs be kept over—that is, preserved in an ice-house to prevent their hatching; and I believe that the profits of the second feeding would be at least three-fifths in amount of that of the first. But I purposely omitted this source of profit in my calculation, because I did not wish to assume second crops and feedings as matters of course, as they must depend on circumstances.

"5th. Which is the most valuable species of the silk-worm, what the best mode and time for their propagation; the quantity, quality, value of, and market for, the cocoons?"

The most valuable species of the silk-worm the large white.

The best mode and time for their propagation is as follows: The eggs, as soon as the worms have finished laying, should be folded up, placed in covered tin boxes, and put away in a dry cool cellar, where they should be permitted to remain undisturbed until spring. If *two crops* be desired, as soon as the spring comes, take those *deposite* boxes from your cellar, and place them in an ice-house. Here they, of course, are permitted to remain until the period of hatching arrives. The time of hatching the worm must be determined by the spring, and condition of the foliage of your trees. As soon as the leaves are as large as a quarter of a dollar, it may be safe to place your worms on your hatching-tables. When placed there, the heat of the surrounding atmosphere will soon bring them forth. After which, they are to be fed; and, as they arrive at sufficient bulk for removal, are to be transferred to the shelves or hurdles.

The quantity and quality of cocoons are both influenced by care, attention, regular feeding, clean apartments, and wholesome food. Three thousand worms will make one bushel of cocoons; which, according to their quality, may be worth \$3, \$3½, or even \$4. The acre, of course, will produce 333½ bushels; one bushel of cocoons being equal to one pound of raw silk.

At present, the only markets for cocoons are Philadelphia and the other more eastern cities. In almost all the principal cities east and north of Philadelphia, any practicable quantity of cocoons would find a ready and advantageous market at the prices named, there being several silk factories now in operation in that quarter, and the supply of raw silk wholly inadequate to the demand.

To the 6th question, I reply: That the State of Maryland has not as yet granted any encouragement to promote the culture of mulberry and sugar-beet. At the present session a bill was introduced into the House of Delegates of this State, granting bounties on the silk-culture; but it was lost by a vote of 36 to 28. This bill contemplated a bounty of a dollar for 300 trees, and a similar sum for any larger number; and a bounty of ten cents per pound on cocoons and fifty cents per pound on reeled silk. The chief cause of the defeat of this bill arose out of the embarrassed condition of our State finances, and the heavy demand upon her for our several objects of internal improvement. From the universal friendly feeling manifested by even those who opposed the defeated bill, I have no doubt that it, or one similar in its provisions, will become a law next year.

To the 7th query, I answer: The white *Silesian* beet is the best variety. As to the best mode of cultivating it, I give the following as the plan:

Culture.—Plough the ground deeply, say to the depth of 7 or 8 inches, in the fall of the year. In early spring, as soon as the frost is out of the ground, cart on your manure, (say 20 double cart-loads to an acre) spread it, and as you spread it, let it be ploughed in, so as to lose as little as possible by evaporation. This ploughing should be done crosswise, so as to make the pulverization as thorough as possible; and the furrow should be carried to the depth of the fall ploughing. About the 10th of April, in all the States south of Delaware, will be about the time for commencing planting; which process may be continued till the middle of May. When you are ready for plant-

ing, spread on your ploughed furrows about five loads of good well-rotted manure; and, if you can do so, about a hundred bushels of ashes, or twenty of lime, mixed with it. If you have no rotted manure, mould from the woods will answer. When this is spread as equally as possible, put on a heavy harrow, and harrow your ground until it is perfectly fine. When your ground is thus prepared, take a line and stretch it across the patch from north to south; then take a small hoe and run drills about an inch deep and two feet apart. In those drills drop your seed about six inches apart; which can be done almost as expertly as corn. Previously to planting the beets, the seed should be soaked in a solution of soot and saltpetre for twelve hours.

When the beets come up, and get about three or four inches high, let them be thinned out, so as to stand twelve inches apart in the drills. At the time of thinning out, the person in charge of it must be careful to hand-weed all the weeds and grass, so that the young plants may have nothing to encumber their growth at this period. The *thinner* should be followed by a hand with the hoe, who should loosen the earth around the plants, and stir up that between the drills, taking care to destroy all grass and weeds. In two weeks another hoeing should be given; and, at an interval of two weeks more, the third and last hoeing should be given them. This culture, unless the season be very wet, and weeds and grass multiply very fast, will be sufficient to ensure a good crop; but, should it be rainy, an extra hoeing may be necessary: of its being so necessary, the eye of the culturist must determine for himself. He should bear this in mind, *that his beets must be kept clean of weeds of all kinds; and the ground well stirred.*

Cost and profit.—I have shown, in the preceding part of this letter, that, with care, 1,000 bushels of beets could be produced from an acre. For feeding of stock, they are worth thirty cents per bushel; and, in the aggregate, would be worth \$300: from which deduct rent of land, say \$2; ploughing three times, \$6, harrowing three times, \$2, seed, four pounds to the acre, \$6; planting seed four days, (if by hand,) \$2; hoeing three times, (twelve days,) \$6; harvesting and putting away, \$6; manure \$25—\$55; which, when deducted from \$300, leaves \$245 as the clear profit on an acre.

I have confined myself, on this interesting subject, to the beet as food for cattle; of its value for making sugar I know nothing *practically*, and therefore shall not speak; but will refer the committee to the report of Mr. Pedder, made to the Beet-Sugar Society, of Philadelphia, in 1836; a work which should be in the hands of every agriculturist in the country.

I know nothing of the "necessary expense of erecting suitable works for the manufacture of sugar from the beet;" and therefore cannot answer the 8th and 9th queries.

Having thus gone through your several inquiries, I beg leave to subscribe myself your obedient servant,

EDWARD P. ROBERTS,

Editor Farmer and Gardener.

Hon. JOSEPH F. RANDOLPH,
of Committee on Agriculture,
House of Representatives.

LOOK WELL TO YOUR ADVISERS.

Last fall we advised a neighbor, a very worthy man, but in moderate circumstances, to invest five hundred dollars in the *Morus multicaulis*, for propagation the present year. Feeling an interest in the welfare of the man, we rather urged him into the measure, offered him every assistance in our power in procuring his stock, and assured him that there was no danger of loss. At one time he pretty much made up his mind to make the trial, but soon informed us that he had entirely abandoned the notion. Coming to us a few weeks since to purchase trees, we remarked to him that he appeared to have new confidence in the business. To which he indignantly replied, "Yes, and had it not been for ——— I should have bought last year—he advised me by all means not to." Had he bought two thousand trees, which he might for \$500, they would have produced him probably 20,000, which he might have sold readily for thirty five cents, making in the aggregate \$7,000,—a snug little estate. We informed him that our trees were all sold, and we could not furnish him—but we would give him one more word of advice, which, if duly regarded, might be of some use to him in future:—when you want legal advice, go to a lawyer; medical advice, go to a physician,—clerical advice, go to a clergyman; but when you want mulberry advice, be sure to ask it of a mulberry man. The man has since laid in a stock of trees, and, we hope, will be as successful the next season, as he might have been the past.—*Silk Culturist.*

NEW USE OF THE WORM.

In all our admiration of the industrious habits, docile disposition, and beautiful products of the silk worm, we have never dreamed that, after its labors are completed, its body is convertible into palatable and wholesome food for either man or beast. But if the following statement which we have taken from an exchange paper, be true, it is eaten in China as a common article of food, in health, and highly esteemed as diet for the sick. We cannot say that we have much confidence in the statement, and transfer it to our columns more on account of its novelty, than utility.

"M. Favand, a French missionary, states that during his late residence in China, he often eat the chrysalis of the silk worm, and found it to be both good and wholesome. It is much used there by persons in a delicate state of health. After the cocoons are spun, the chrysalis are fried in order that the watery parts may be quite discharged; and on being stripped of their covering, present a yellow appearance, like the spawn of a carp. They are then fried with butter, grease or oil, and afterwards put into broth. When they have boiled five or ten minutes, they are crushed with a spoon, care being taken to stir them up, so that nothing adheres to the bottom of the vessel. The yolks of eggs beaten up in the proportion of three for every hundred chrysalis are then poured over them, and the finest gold colored cream of the most exquisite taste is thus obtained."—*ib.*

SILK TRADE OF THE UNITED STATES.

We are under renewed obligations to Mr. Nourse, of the Treasury department, for the following statement of the silk trade of the United States for the

last seventeen years. From the accompanying letter, it will be seen that it is not only explanatory of a statement furnished by him, and published in our June number, but includes the amount of imports and exports for the ten preceding years. The attentive reader will also notice that the amount of imports for the year 1837, fell short of those of the previous year, \$8,627,589, and that the exports of 1837, exceed those of 1836, \$445,072, leaving an aggregate amount of \$9,072,461 less to be consumed in the country. The cause of this falling off is doubtless attributable to the embarrassed state of commercial business in this country, and its consequence will doubtless be a new impulse to the enterprize whose ultimate object is to supply the demands of the country with silk of domestic growth.—*ib.*

WASHINGTON, SEPT. 7th, 1838.

F. G. COMSTOCK, Esq.,

SIR:—You received from me, some months since, a statement of silks imported from 1831 to 1835 inclusive. It was formed from the custom-house returns, as far as the several kinds were specifically exhibited; from further examination, however, it appears that in some years, especially in 1834, a considerable amount was returned under the head of "Articles not enumerated." The enclosed is a correct statement, and exhibits the import and export of silks from 1821 to 1837 inclusive.

I am respectfully yours,

MICHAEL NOURSE.

Exhibit of the value of silks, imported and exported, from 1821 to 1837, inclusive.

SILKS.

Year.	Imported.	Exported.
1821,	\$4,486,924	1,057,243
1822	6,840,928	1,016,262
1823	6,718,444	1,512,449
1824	7,204,588	1,816,325
1825	10,299,743	2,590,381
1826	8,327,909	3,367,015
1827	6,712,015	1,871,276
1828	7,686,640	1,270,461
1829	7,192,698	956,925
1830	5,932,243	1,061,054
1831	11,117,946	1,186,129
1832	9,248,907	1,337,073
1833	9,498,366	1,322,872
1834	10,998,964	1,036,057
1835	16,687,547	753,900
1836	22,980,212	762,730
1837	14,352,823	1,207,802

T. L. SMITH, Register.

Treasury Department,

Register's Office, Aug. 31st, 1838.

TRADE OF NEW ORLEANS.

To P. BYRON BARKER, Esq.

New Orleans, Oct. 6th, 1838.

SIR:—As it has become an established custom that the Commercial year ends on the 30th September, we have on the commencement of the new commercial year, obtained and hand to you, herewith annexed, the Statements and Tables of Imports, Exports, etc. of New Orleans, for the last ten years, which appeared on the 1st instant, in the New Orleans Price Current and Commercial

Intelligencer, published by Mr. Benjamin Levy, and edited by Mr. George B. Young: together with the Statements of Stocks of cotton and tobacco on hand, to yesterday the 5th instant.

You will discover on examination, that those statements are worthy of attentive perusal, and will be found of great value to commercial men, for the purpose of placing them on file for future reference.

The receipts of the new crop cotton to this date, amount to about ten thousands bales, the principal portion of which is already disposed of at 12 to 13 1-4 cents. Some small lots, probably gathered during or after the last rain, were sold at less than 12 cents, and some small lots very superior, brought 14 cents and upwards. If the navigation of Red River had not been interrupted, the arrival of new cotton would be increased to this time, probably by at least five thousand bales.

The commercial intelligence furnished by the arrival of the Great Western, which left Bristol on Saturday evening, 8th September, affords the most lively satisfaction, to learn that during the 14 to 20 days prior to her departure, the weather had been remarkably propitious to the harvesting throughout that nation; and the fears existing, which we mentioned in our last of 27th ult., of the scarcity of grain, and of the many evils attending such a calamity, had entirely subsided. The speculators in the grain market had retired, and the former reasonable prices were gradually becoming re-established. This result of an abundant harvest in England, and particularly as the harvesting was favorable in France, and also as far as was known in other nations on the Continent, will have a happy effect on the value of the productions of the United States, by the consequent facility of conducting manufactures in Europe, and the continued low rates of interest in the money market.

The Liverpool cotton market, during the three last weeks prior to the departure of the Great Western on the 8th Sept., showed much less sales than the week closing 11th August, wherein 47,540 bales of all sorts were disposed of; indeed, in those three weeks the sales were far less than is required for the weekly consumption; the week ending 24th August only 20,900, and the week ending Saturday, 1st September, only 21,100 bales were sold; the particulars of the last week, ending Saturday, 8th Sept., could not be ascertained in time to be sent from Liverpool to Bristol for the Great Western, but enough was known by the list of sales to Friday evening the 7th Sept., to estimate that the sales of the week would not vary far from 21,000. The prices of New Orleans cotton were the same as previous rates, ranging from 5 1-4d. to 8d for the bulk, and varying below 5d. for inferior and above 8d. for lots of the finer sorts. It may be noticed, that as the sales of those three weeks did not equal the quantity of the average weekly estimated consumption, an improved demand ought to be the consequence, especially after the happy event of good harvests were fully developed, and by the increased impulse thereby given to trade throughout England.

The dry weather experienced with us during the two, and in many places during the three past months, has completely arrested Steam boat navigation in most of the tributary rivers, and has had more or less of a blighting influence on all the products of the soil throughout the Mississippi Valley,

with the sole exception, perhaps, of the Sugar Cane. In some portions of the grain country, it is believed, there will be little or no corn produced over the actual wants of the farmers. In the Tobacco districts, the Tobacco plant has severely suffered, and in cotton regions there are few planters, who have not reason to complain, that the dry weather has very materially diminished the quantity of their crops, though the quality is much improved in appearance, if not in reality.

The provision market continues tolerably supplied, though at greatly advanced prices and those enormous rates would still be more augmented, were it not for the circumstance, that the trade is uninterrupted between this city, Missouri and Western Illinois, and is actively kept up, by even more than the usual number of large class steam boats.

Respectfully,

Your ob'dt Servants,

S. W. OAKLEY & CO.

SUMMER FALLOWING.

This is one of the most important branches of good farming, and upon which has arisen a great variety of opinion and practice. Some farmers are of opinion, that the ploughing for a summer fallow cannot be too frequent, and that all fallow crops are injurious to the land, and particularly to the succeeding crops. Others consider all naked fallows as a waste of expense without any adequate benefit, and insist upon fallow crops, either of turnips, to be fed off by sheep, or of potatoes, to be dug for stock, or of buckwheat, or clover, to be ploughed in as a fertilizing crop. Both probably are in error, and run into the opposite extremes. A strong, stiff clay, or a hard gravelly soil, cannot be ploughed too often for a fallow; but a loose sandy soil may be greatly injured by too frequent ploughings. The latter may be tilled to advantage, with a potatoe fallow, to be fed off by sheep; or after several ploughings, with the fertilizing fallows of buckwheat ploughed in; but a rough stony soil cannot be tilled with a fallow crop to advantage: this land and perhaps this only, requires a naked summer fallow. The great advantages to be derived from a summer fallow are these:

1. Frequent ploughings destroy the herbage upon the fallows, and the roots and seeds of herbage, and thus render the grounds clean for the following crops.
2. This is greatly promoted by a potatoe fallow, both in hoeing and digging.
3. The plough renders the earth light and mellow, to receive the seed when sown, and to admit the extension of the roots of the grain, when it vegetates.
4. At each ploughing it changes the soil, and exposes a new surface to receive the benefits of the sun, air, rains and dews, with their fertilizing powers.
5. It renders the earth light and pervious for the admission of the sun, air, rain, dews, and opens a free circulation for them to the roots of the grain (on all plants whatever) and thus they impart their fertilizing properties to the vital principles of the crop you cultivate.
6. The green fallow, when ploughed in, as well as the potatoe fallow, greatly promote this benefit by meliorating the soil. Upon this principle, the

plough, with the fertilizing crops upon a summer fallow, are the only substitute for manure, under tillage, because the effects are the same, with this exception, that the meliorating effects arising from the fermentation of strong manures, are both greater for the time and more permanent and lasting. The manure, also, will continue to assist the plough in meliorating the soil for after crops, by causing a new fermentation upon every new exposure of the surface to the air, until the strength of the manure is wholly exhausted. Hence, again, the value of your potatoe fallow, to increase your number of stock and quality of manure.—*Franklin Farmer.*

GREAT SALE OF CHINESE MORUS MULTICAULIS TREES.

An immense concourse of buyers attended the sale which took place yesterday at Wm. H. Franklin's auction room, and in fact their great sales room was so crowded that it was with difficulty one could gain admittance, and it was thereby rendered impossible for purchasers to view the specimen bundles of trees.

If another sale is got up, it would be best to select the most spacious room in the city. During the sale the greatest anxiety was evinced by purchasers to obtain supplies of this invaluable tree; but they seemed equally anxious to bring down the prices if possible. The prices ranged from 18 to 22 cents per foot, and some very large trees three or four years old brought the enormous price of \$18 each. The cuttings sold at 3½ to 4 cents each.—Taking into consideration the great number offered at this sale, the prices were well sustained, and had there been but twenty to twenty-five thousand offered, the prices would have undoubtedly ranged as high as 24 to 26 cents per foot, and perhaps more. The auction price last spring at Philadelphia and Burlington was 35 cts. per foot, and with the great increase of purchasers and the growing interest on the subject of silk culture, there cannot exist a doubt but that the next spring prices will be as high or higher than those of the last season. One circumstance attending this sale which struck us with particular force was the great advance in price which those trees brought which were actually exhibited at the sale—the others being sold for future delivery only.

A large quantity of trimmed trees exhibited and ready for immediate delivery, sold at prices that would average about 20 cents per foot, altho' these are worth one-third less than the untrimmed trees.—*N. Y. Star.*

THE POTATOE TRADE.—Great quantities of potatoes have been shipped from most of the seaport towns of Massachusetts, New Hampshire and Maine for Southern States. The Portland Advertiser, in speaking of the trade in this article, says, potatoes are selling in some places south, at a less price per bushel than they sold for before shipment. A lot of potatoes shipped from Massachusetts to Philadelphia, and costing nearly 45 to 60 cents a bushel on board vessel, are now in the Philadelphia market, and nobody there is willing to give more than the original price—thus losing the whole amount of freight, and perhaps something more.

The Portsmouth Gazette says, ten thousand bushels of potatoes have already been shipped from that port to the south. They sell common at 40 cents and Chenangoes at 50. Back in the country 20 or 30 miles, the Gazette says, they turned out well. The Bath Telegraph says that a greater quantity of potatoes than ever before known, has been shipped from that place and the towns above, during the last fortnight, for southern ports. They are worth there from 30 to 40 cents per bushel, and we apprehend that if many are shipped, they can soon be purchased cheaper at the south than at the north. The Telegraph estimates that upwards of three hundred thousand dollars will be expended in this state, in the purchase of potatoes for shipment. Some of the Boston papers express the hope that the potatoe shippers will not forget that they can find a market for their surplus potatoes without shipping them to the south. Potatoes bear a high price in the Boston market.

The Advertiser adds—it appears to us that if shipments and sales are to be made, it would be as well to postpone the sale, at least for some time to come. Some of our southern buyers expect that the recent, present and contracted shipments of potatoes will drain the state of Maine. It is impossible. We have a large supply as yet, and if all the world will give the farmers of Maine fair notice that they wish to be supplied from Maine, the supplies can be made easily and profitably.

Yorkers look out!—Mr. Timothy Baldwin of Branford (Conn.) near New Haven, has raised a cabbage weighing 30 pounds!

Michigan Wheat.—Michigan is sending east her bread stuffs in good earnest. Twelve thousand bushels of wheat were cleared from Toledo early in the week, the produce of Michigan. The Blade says daily shipments of Flour by steamboats are made by the forwarders of Toledo. It is estimated that 10,000 barrels of Michigan Flour, and 50,000 bushels of wheat will be shipped from Toledo this Fall. Worth more than the whole batch of Michigan wild cats, in facilitating exchanges, and improving the currency.

Important to the purchasers of the Morus Multicaulis.—I wish to make some remarks as to the Morus Multicaulis, especially to the purchasers of buds this season, as it is of some importance to them. It has been the practice to strip the trees of all its leaves before coming to maturity, which is a great injury to the bud, because when the tree has received that nourishment to protect and ripen the wood, the leaves will fall off themselves without depriving the bud of that vegetating power, which I know is practised to a great extent. If the bud is not ripe, it requires great care to make it vegetate, and the standard for receiving the buds or cuttings ought to be strictly adhered to; to receive none but what are ripe, and perfected, as the others will shrivel and decay, if not properly managed.

A CULTIVATOR.

Cattle Bazaar.—The show of Durham bulls and cows, of Berkshire swine and of fine sheep, at the Fair yesterday, notwithstanding the rain, was highly encouraging to this first attempt of the

American Institute to associate the exhibition of live stock of best breeds, with that of machinery, manufactures, &c. There were some fifty Durhams sold, among them two most beautiful white bulls, bringing from \$750, we learn, to \$500—We have not yet ascertained the particulars. We hope the society will make such ample arrangements for this department at the next annual fair, as will ensure a large gathering of the excellent breeds of stocks that abound on our highly cultivated farms on Long Island and the Hudson river. Other States would unite in this enterprise, and there is no reason why New York may not thus have a grand Bazaar for cattle and stock of all kinds added to the other markets of this extensive commercial emporium.—*N. Y. Eve. Star.*

The Crops.—We are glad to learn from the "Carolina Watchman," that the Corn Crops in Stokes, Surry, Davie, and Rowan, are better than was supposed, before they were gathered. The current price for new Corn is 50 cents per bushel, Flour \$3 per cwt, Oats 30 cents, Bacon 15, Butter 12½, Lard 12½, Beef 4 & 5 cts., Mutton 5 cts., Chickens \$1 a dozen.—Most of these articles, says the "Watchman," are afforded in great abundance at these prices, so there is no great danger of our people's starving the next year at the least. One thing to help out Corn Crops in many places, is the large quantity of Oak mast.—*Raleigh (N. C.) Register.*

For the Farmer and Gardener.

NORTON'S SEEDLING GRAPE.

Several years ago, when Editor of the American Farmer, I received a large number of specimens of grapes from a gentleman in Pennsylvania for inspection; among them was one marked "Norton's Seedling." My correspondent alluded to that specimen particularly, and requested my opinion of its qualities. I gave my opinion freely, pronouncing the specimen a very inferior grape. My opinion has remained unchanged until a few days since, when Dr. Norton called and presented me a sample of his seedling. This is a very different grape from the one sent me from Pennsylvania, and proves conclusively that my former correspondent had been deceived. The true Norton Seedling, as presented by Dr. Norton, is a remarkably *sugary* grape, of medium sized berry, compact moderate sized bunch; the fruit without pulp, very juicy, thin skin and rich. It is a black grape, covered with bloom. The Doctor states that the vine is a great and never failing bearer; the fruit not subject to rot, and all on the bunch ripening at the same time. It is ripe about the 15th of September, and has kept well till near the 25th October.

I feel it incumbent on me to make this statement, though at this late day, (and should have been equally ready to do so before, had a sample been furnished,) in justice to Dr. Norton, and also with a view of making the grape better known.

The Doctor also presented me samples of the Cunningham Prince Edward, and the Woodson grapes, both excellent fruits; the former a black grape, found wild in Prince Edward County, Va.; the latter reddish purple, and also found wild in Virginia.

GIDEON B. SMITH.

From the Elizabeth City, (Tennessee) Republican.

SAXON SHEEP.

This breed is about to be introduced into East Tennessee—A Gentleman from the North, having some knowledge of the mountains so common to our section, had come to the resolution to bring, and is now on his way with 300 Saxon Sheep, selected for the purity of their blood.

Sheep in our mountain ranges cannot but succeed. To the North the winters continue so long that grass is wanting, when it would be most serviceable to Ewes and lambs, and for the want of nourishment suited to the suckling season, together with the cold of a northern climate, many of the young are lost. This would not be the case in our latitude. Here we can select almost any degree of temperature wanted; our valleys and sheltered situations for winter, and the mountains for summer, each in turn can be used as occasion may require; and change of situation is best suited for flocks as experience proves. With such advantages, wool growing cannot be otherwise than a profitable business in E. Tennessee.

But there must be decided advantages in improving the breed; the demand for fine wool, its value being double that of the common, and the Saxon producing as much in weight in proportion to the size of the animal, as any other, are decided arguments in favor of the breed producing the finest fleece.

Any farmer who will estimate the profit of 1000 sheep, will find that East Tennessee has it in her power to rival in profits the cotton planter, by pursuing the pastoral life; the easiest, most innocent, and delightful, man can enjoy.

Mixtures of the Saxon with our common stock, will enable the people of Tennessee to furnish to the manufacturer, wool suited for the varieties of fabrics made from that staple, and manufactories will spring up every where, provided wool can be had.

While we are improving the breeds of other stock, let us not neglect the Sheep.

The investment of a small capital, will lay the ground work of handsome profits to the adventurer; and considering his own profits, he will also have the consolation of knowing that he is doing something for his country.

Without being too sanguine, we may look forward to the time not remote when our hills and mountain slopes, (now esteemed of little value) will teem with flocks and herds.

Improvements are upon the advance; let us keep pace with them in every thing; each improvement in the products of our country is a source of national independence; wastes should be changed into fields—our water falls made to perform the labor of thousands, encouraging the arts—and thus by the many means in our power turning the balance of trade in our favor.

A FARMER.

MULBERRY TREES.

The subscriber has several thousand prime MULBERRY TREES, for sale; warranted genuine, and of good growth, will be sold by the foot or single tree, to be delivered this fall.

Letters, POST PAID, enquiring price, &c. will be addressed to the subscriber at Centreville, Queen Anne's county, Eastern Shore, Md.

J. B. SPENCER.

Sept. 22.

FOUR DEVON BULLS FOR SALE.

The subscriber has for sale 4 North Devon Bulls, of the purest blood in this country or Europe, having proceeded from the stock of the Earl of Leicester, a gentleman better and more advantageously known as Mr. Coke of Holkam, who before endowed with title by the present Queen of England, was by universal acclamation designated as the *Great Commoner of England*—and it has been universally conceded that one so illustrious by his acts could not be ennobled by the addition of a title.

The subscriber, without indulging in exaggerated praise, can conscientiously say, that he never beheld four more beautiful animals, and he, therefore, takes peculiar pleasure in recommending them to such gentlemen as may wish to improve their stock by a cross with this time honored race of British Cattle.

The North Devons are no less remarkable for their docility of disposition, than they are for their propensity to take on fat, and the richness of their milk. The Devon ox, as all know, are distinguished for the rapidity and elasticity of their step, as well as for their capacity to endure fatigue. As oxen, therefore, there is no other race that can compare with them.

The above bulls will be sold for \$80 and \$100 each—they are 3 and 4 years old. Terms cash on delivery in Baltimore.

Applications by letter to be post paid.

EDWARD P. ROBERTS,

Editor Farmer & Gardener,
Baltimore, Md.

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CHINESE MULBERRY TREES.

American Silk Agency, No. 5, Bank street, Philadelphia.

The subscriber having opened a permanent Agency for the purchase and sale of all articles connected with the culture and manufacture of Silk in the United States, offers for sale all the different varieties of MULBERRY TREES, suitable for raising the SILK WORM; viz: *Morus Multicaulis Alpines*, *Brussa Multicaulis Seedlings*, *Morus Expansa*, *Multicaulis Cuttings*, *Improved Italian Trees*, &c. Also, Cuttings from *Norton's Virginia Seedlings*; and *Cunningham's Prince Edward Grape Vines*. These vines produce an abundant crop of fruit, warranted not to rot or mildew and are fine for the table, and capable of yielding the finest wines.

S. C. CLEVELAND, Agent.

Those who may wish to enter into this profitable branch of national industry, will do well to call at the Agency, and see that they are well instructed in the value of the trees they purchase.

N. B. The particular attention of those engaged in the culture and manufacture of American Silk, whether of trees, Eggs, Cocoons, reeled or manufactured, is called to this agency. The Agent will give every attention to Sales, and prompt remittance of proceeds of any article sent to him. Those who may wish to purchase and enter in this valuable branch of home industry, can obtain from the agent every information, and also such articles as they may want without fear of deception.

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AGRICULTURAL IMPLEMENTS AND SEED STORE.

THE SUBSCRIBER informs the public that he keeps constantly on hand at his old establishment in Pratt-street, near Hanover, a large assortment of PLOUGHS and Agricultural IMPLEMENTS generally, which are too numerous to name in an advertisement, but invites such of the public who are in want of any articles in his line to call, assuring them that his work shall be as well made, of as good materials, and on as reasonable terms as any in the State. His patent Cylindrical Straw Cutters made on his late improved plan are kept at all times on hand, of various sizes and prices, with wood and iron frames—and he challenges its equal in any part of the world. Having an iron foundry attached to my establishment, all orders for Ploughs and Machine castings can be furnished at short notice and on reasonable terms.

In store—Herds and Orchard GRASS SEEDS, of prime quality; also, Landreth's superior GARDEN SEEDS. He is also agent for Mr. Samuel Reeves' Nursery, near Salem, New Jersey, whose fruit trees he can recommend to the public with confidence. Those wishing Trees from that Nursery this fall should hand in their orders immediately.

J. S. EASTMAN.

FOR SALE,

COLUMBUS, a well bred race horse—his pedigree, which is perfect, will be given. Enquire of no 6 St EDW. P. ROBERTS, Ed. Farm. & Gard.

LARGE SALE OF SUPERIOR STOCK.

The subscriber, in consequence of protracted illness, is reluctantly induced to offer his entire stock of DURHAM AND OTHER CATTLE at Public Sale on his Farm, in the immediate vicinity of Marietta, Lancaster county, Pa., on THURSDAY, the 15th day of November next.

The stock of Durhams consist of 46 head of different grades, from full-bloods to halves; the full-bloods include:

The celebrated BULL BOS, six years old, raised by Gov. Lewis of the State of New York. He was sired by Wye Champion, his dam Brinda.—Wye Champion was bred by Gov. Lloyd of Maryland; his sire was Champion, his dam Sheperdess. Champion and Sheperdess were imported from England. Brinda was bred by Mr. James Cox of Philadelphia; her sire Chester, dam Corinna—Corinna by Bishop, dam Cora an imported cow. A further and full pedigree will be exhibited at the time of sale.

BULL JUNIATA, full bred Durham, got by Emperor, and from a full bred Cow.

BLINKEY, three-fourths Durham, bull calf, 5 months old.

Also, several Durham bull calves from one to three weeks old.

The superior Cow FLORA and Heifer calf, formerly owned by the Hon. C. A. Barnitz of York, Pa., and known as his celebrated butter cow; got by Malcolm, her dam Julia, bred by Mr. Buel—Flora's calf by Juniata.

White Rose, a full bred Cow by bull Bos, her dam by Uge Comet, great dam, full bred Cow derived from Mr. Powell's stock.

Red and white Heifer, one year old, by Bos, dam Flora.

White Heifer, one year old, by Bos, dam full bred.

Fancy Chinese Cow and Heifer calf—calf by Juniata.

Also, a small Flock of superior South Down Sheep, full blood.

40 head of various sized Shoats.

4 Colts from 1 to 3 years old, two of which supposed to be full bred, sired by Veto and Count Bertrand.

Sale to commence at 10 o'clock, when the terms will be exhibited.

FREDERICK HAINES.

P. S. A part of the above named stock may be obtained at private sale, previous to the day of public sale.

Marietta, Pa. Oct. 26, 1838—nov 6 2t

DURHAM STOCK FOR SALE.

No. 1. *Matilda*, 3 years old, a dark mahogany red or Devon color; she is out of a half Devon cow, by a full bred Durham bull, and now in calf by one. He price is \$60.

No. 2. *Beauty*, a handsome roan, 4 years old, fresh in milk, possesses the fine points of the Durham; she is half Durham, and her price \$75.

No. 10. *Snow*, a white heifer, with red neck and ears, 2 years old, in calf by a full bred Durham bull—price \$50.

No. 11. *Pink*, a whitish roan heifer, 2 years old, in calf by a full bred Durham bull—price \$50.

No. 12. *Cherry*, a half Devon cow, 7 years old, a fine milker, in calf by a full bred Durham bull—price \$60.

The above cattle are offered for sale by the subscriber, at the above reduced prices—terms, cash on delivery.—Applications made by letter to be post paid.

EDWARD P. ROBERTS,

Baltimore, Md.

no 5 3t

GENUINE BARNITZ PIGS.

The subscriber has for sale the following pigs, which are warranted genuine:

2 pair 4 months old, and

1 pair 10 weeks old.

The Barnitz hogs are distinguished for their early maturity and size, attaining upon clover pasture from 250 to 300 lbs. when 12 and 15 months old. The price of the largest size is \$15 a pair; that of the smallest \$10 a pair.

Applications by letter to be POST PAID.

EDWARD P. ROBERTS,

Baltimore, Md.

oc 30

THE AMERICAN FARMER.

The proprietors of this paper have a few complete sets of this work on hand, which they will dispose of at the reduced price of \$50 a set.

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every Monday

	PER	FROM	TO
BEANS, white field,	bushel.	1 25	
CATTLE, on the hoof,	100lbs	7 25	8 90
CORN, yellow	bushel	87	88
White	"	85	
COTTON, Virginia,	pound	9	11
North Carolina,	"	9 1	11
Upland,	"	9 1	11
Louisiana — Alabama	"	11 1	12
FEATHERS,	pound.	45	50
FLAXSEED,	bushel.	1 12	
FLOUR & MEAL—Best wh. wh't fam.	barrel.	10 00	10 50
Do. do. baker's,	"	—	—
SuperHow. st. from stores	"	7 75	7 87
" wagon price,	"	7 62	7 75
City Mills, super,	"	7 75	—
" extra	"	7 75	—
Susquehanna,	"	—	—
Rye,	"	5 50	—
Kiln-dried Meal, in hhds.	hhd.	19 00	—
do. in bbls.	bbl.	4 00	—
GRASS SEEDS, wholes. red Clover,	bushel.	—	—
Kentucky blue	"	—	—
Timothy (herds of the north)	"	—	—
Orchard,	"	2 00	2 50
Tall meadow Oat,	"	—	3 00
Herds, or red top,	"	90	1 00
HAY, in bulk,	ton.	12 00	16 00
HEMP, country, dew rotted,	pound.	6	7
" water rotted,	"	7	—
HOGS, on the hoof,	100lb.	8 50	9 00
Slaughtered,	"	—	—
HOPS—first sort,	pound.	9	—
second,	"	7	—
refuse,	"	5	—
LIME,	bushel.	32	33
MUSTARD SEED, Domestic, —; blk.	"	3 50	4 00
OATS,	"	40	—
PEAS, red eye,	bushel.	—	1 12
Black eye,	"	1 00	1 12
Lady,	"	—	—
PLASTER PARIS, in the stone, cargo,	ton.	4 00	—
Ground,	barrel.	1 50	—
PALMA CHRISTA BEAN,	bushel.	—	—
RAGS,	pound.	3	4
RYE,	bushel.	90	93
Susquehanna,	"	—	none
TOBACCO, crop, common,	100lbs	4 00	4 50
" brown and red,	"	4 00	6 00
" fine red,	"	8 00	10 00
" wrappery, suitable	"	—	—
for segars,	"	10 00	20 00
" yellow and red,	"	8 00	10 00
" good yellow,	"	8 00	12 90
" fine yellow,	"	12 00	16 00
Seconds, as in quality, ..	"	6 00	—
" ground leaf,	"	5 00	8 00
Virginia,	"	4 50	6 00
Rappahannock,	"	—	—
Kentucky,	"	5 00	8 00
WHEAT, white,	bushel.	1 65	1 75
Red, best	"	1 65	1 70
Maryland	"	1 55	1 65
WHISKY, 1st pf. in bbls.	gallon.	44 1	45
" in hhds.	"	43	—
" wagon price,	"	—	—
WAGON FREIGHTS, to Pittsburgh,	100 lbs	2 25	—
To Wheeling,	"	2 50	—
WOOL, Prime & Saxon Fleeces, ..	pound.	50 to 55	—
Full Merino,	"	45 50	—
Three fourths Merino,	"	40 45	—
One half do.	"	35 40	—
Common & one fourth Meri.	"	35 40	—
Pulled,	"	30 33	—
POTATOES, 60 to 70 cts. a bushel.			

BALTIMORE PROVISION MARKET.

	PER	FROM	TO
APPLES,	barrel.	—	—
BACON, hams, new, Balt. cured...	pound.	16	17
Shoulders,	"	14	15
Middlings,	"	14	15
Assorted, country,	"	14	15
BUTTER, printed, in lbs. & half lbs.	"	31	37 1/2
Roll,	"	25	31 1/2
CIDER,	barrel.	1 75	2 00
CALVES, three to six weeks old...	each.	5 00	6 00
Cows, new milch,	"	25 00	40 00
Dry,	"	12 00	15 00
CORN MEAL, for family use,	100lbs.	1 75	—
CHOP RYE,	"	1 50	1 60
EGGS,	dozen.	12 1/2	—
Fish, Shad, No. 1, Susquehanna,	barrel.	9 75	10 00
No. 2,	"	9 50	—
Herrings, salted, No. 1,	"	5 75	—
Mackerel, No. 1, ——— No. 2	"	12 50	—
No. 3,	"	—	7 25
Cod, salted,	cwt.	3 25	3 37
LARD,	pound.	14	15

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

	PER	FROM	TO
U. S. Bank,	par		
Branch at Baltimore,	do		
Other Branches,	do		
MARYLAND.			
Banks in Baltimore,	par		
Hagerstown,	o		
Frederick,	do		
Westminster,	do		
Farmers' Bank of Mary'd, do	do		
Do. payable at Easton,	do		
Salisbury,	1 per ct. dis.		
Cumberland,	par		
Millington,	do		
DISTRICT.			
Washington, } Banks, 1p.c.			
Georgetown, }			
Alexandria, }			
PENNSYLVANIA.			
Philadelphia,	par		
Chambersburg,	1/2		
Gettysburg,	do		
Pittsburg,	2 1/2		
York,	1 1/2		
Other Pennsylvania Bks. 2			
Delaware [under \$5]	4		
Do. [over 5]	1 1/2		
Michigan Banks,	10		
Canadian do.	10		
VIRGINIA.			
Farmers Bank of Virgi. par			
Bank of Virginia,	do		
Branch at Fredericksburg, do			
Petersburg,	do		
Norfolk,	do		
Winchester,	do		
Lynchburg,	do		
Danville,	do		
Bank of Valley, Winch. par			
Branch at Romney,	par		
Do. Charlestown,	par		
Do. Leesburg,	par		
Wheeling Banks,	2 1/2		
Ohio Banks, generally 3			
New Jersey Banks gen. 3			
New York City,	par		
New York State,	do 1/2		
Massachusetts,	1 1/2		
Connecticut,	1 1/2		
New Hampshire,	1 1/2		
Maine,	1 1/2		
Rhode Island,	1 1/2		
North Carolina,	3 1/2		
South Carolina,	4 1/2		
Georgia,	5 1/2		
New Orleans,	7 1/2		

SPLENDID BLOODED STOCK FOR SALE.

The proprietor of Covington farm will dispose of the following fine bulls on reasonable terms, viz.

One bull two and a half years old.
 One do. six months old.
 of the improved Durham short horn breed; the dam of the first was got by the celebrated bull Bolivar; for size, form and beauty they are not surpassed by any animal in the state.

Three Devon Bulls, one of which is seven years old next spring, and the largest Devon in the State. The Devons are from the stock of the late Wm. Patterson, and of undoubted purity.

Two half Devon bulls.
 Two bulls half improved Durham short horn, and half Devon.

One splendid bull, a cross of the Bakewell, Alderney and Devon.

One bull, half Alderney and half Holstein.

These fine animals may be seen at Covington farm, near Petersburg, Frederick county, Md. on application to James L. Hawkins, Baltimore, or to

se 11 f FREDERICK EBERT, Manager.

SPRING CLOVER SEED,

Just received and for sale, by

R. SINCLAIR, Jr. & CO.

oct. 16

3

FOR SALE,

A valuable FARM of prime soil, on the Western Run in Baltimore county, about two miles north west of the 14th mile stone of the Baltimore and York turnpike road, and at the same distance from the depot of the Baltimore and Susquehanna rail road, at Cockey's tavern, in a rich, highly cultivated and healthy tract of country.

This farm contains from 260 to 270 acres, having a full proportion in wood, much of which is building timber, peculiarly valuable in that neighborhood; is in the best state of cultivation; a considerable part in productive timothy meadow, and the residue of the arable land, not in grain, is well set in clover, the whole under good fencing, laid off into convenient fields, each of which is well watered. The farm has a large quarry of excellent building stone. There are on the premises an apple orchard of select fruit trees, which sell in fall to bear abundantly; a valuable mill seat on the Western Run, with a race already dug. There is no location in the country more favorable for a grist mill, having the advantage of a rich and thickly settled neighborhood, and a good public road leading thence to the turnpike road. Buildings substantial and convenient, being a STONE DWELLING, and kitchen of two stories; a large stone Switzer barn, with cedar roof and extensive stabling below; large hay house and stable for cattle; stone milk house near the dwelling, with a spring of fine never failing water, with other out-houses. On the country road near the mill-seat a good house and shop for a mechanic, under rent to a good tenant. It is well known the lands on the Western Run are in every respect equal, if not superior to any in the county. Adjoining or near are the lands of Col. N. Bosley, Daniel Bosley, Toos. Matthews and others. The water power, with about 20 acres of land, is so situated that they may be detached and sold separately, without injury to the rest of the farm for agricultural purposes. Terms of sale will be liberal. Apply to

NATHANIEL CHILDS,

on the premises, or to

WILLIAM J. WARD,

oc 23 tf

Fayette, near Calvert st. Baltimore.

TO THE PUBLIC.

Try the New Agricultural Establishment in

Grant-street, next door to Dinsmore and Kyle.

Every article warranted to be first rate. The subscribers, grateful for past favors, take this early opportunity of returning their thanks to their customers and the public in general, and beg leave to inform them that they are now provided with a very extensive stock of newly manufactured AGRICULTURAL IMPLEMENTS, suitable to meet the call of Farmers, Gardeners, Merchants, Captains of vessels, and others, viz: 1000 Ploughs, assorted sizes, from \$4 to \$15 each, comprising of the old common Bar Shear, Winand's Self Sharpener; Woods & Freeborn's patent, all sizes, "Davis", "Sinclair & Moore's" improved Hill Side Ploughs, highly esteemed for turning the furrow down hill, with wrought or cast shears; Wheat Fans, of various sizes and patterns, from \$15 to \$50 each, warranted to separate the garlic from the wheat; Corn Shellers, from \$12 to \$20; Cutting Boxes, from \$7 to \$50 each; Corn and Tobacco Cultivators, large and small; Expanding do., Wheat Cradles warranted to have fingers of the natural growth, and Grass Scythes, &c. &c.; Castings, of all descriptions and patterns, by the lb. or ton, to suit customers, allowing a liberal discount to merchants buying to sell again—all of which will be furnished on the most pleasing terms and every article warranted to be of the best quality, in proportion to the cost price. All orders by mail or otherwise shall be duly attended to with the greatest despatch.

We would particularly call the attention of Country Merchants and others, wishing to purchase agricultural implements to sell again, to the fact, that we will furnish them with articles on better terms than they can be supplied at any other establishment in the city. Our assortment is complete and as varied as that of the most extensive concern in Baltimore.

We have also connected in its operations with the above branch of business a complete assortment of FIELD AND GARDEN SEEDS, kept by Thomas Denny—Also Garden and Farm Tools, of various sorts and of the choicest collection, which will enable our customers to have filled entire all orders in the Agricultural and Seed Departments. mh 26 JOHN T. DURDING & Co.

A HALF DURHAM COW FOR SALE.

The subscriber has for sale a beautiful fashionable roan half Durham Cow. She is fresh in milk and only 4 years old. Her price is \$75. Applications, post-paid, to be made to

ED. P. ROBERTS.

Who has also for sale several full bred Devons, males and females.

oc 2 4t

THE FARMER & GARDENER.

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, E. P. ROBERTS AND SAMUEL SANDS—EDITED BY E. P. ROBERTS.

No. 29.

BALTIMORE, MD. NOV. 13, 1838.

Vol. V.

✂ This publication is the successor of the late
AMERICAN FARMER

and is published at the office, at the N. W. corner of Baltimore and North streets, over the Patriot office, at two DOLLARS AND FIFTY CENTS per annum, if paid within one month from the time of subscribing, or \$3 if after that time. All letters to be post paid.

BALTIMORE: TUESDAY, NOV. 13, 1838.

THE SILK-GROWERS' CONVENTION.

In another part of to-day's journal the reader will see a notice of a call of a Convention of the friends of the Silk Culture, to be held in the city of Baltimore on Tuesday, the 11th day of December next, and believing the object one well calculated to advance the interests and promote the prosperity of our country, we take unfeigned pleasure in commending it to the attention of our readers. We sincerely hope that the call of the gentlemen who met in Philadelphia on the 25th ultimo, and recommended the measure, will meet with a hearty response from every man in our union in whose breast the pulsation of love of country beats; for surely, in so doing he will render an acceptable service. We have long looked forward, with anxious solicitude, to the day when the silk culture would form a branch of our husbandry—to that end we have labored with untiring zeal—and the anticipated action of the approaching convention, impress us with the hope that it will be the means of giving such an impetus to the silk business proper, as will place it beyond the reach of those casualties, which too often retard the advance of new enterprises. We therefore call upon our editorial fraternity throughout the union, to lend to this project their valuable countenance and support. It is one which holds out that glorious neutral ground on which all, of every party, may meet as brethren and friends—where no jarring interests—no discordant feelings can pervade, to frustrate the object in view. It opens to all a thrice noble theatre of action, on which each may vie with the other in his desire of merging the partizan in the patriot. It is a subject that calls upon every man, who loves his country for his country's sake, to step forward and with holy zeal, further and promote it. With our belief of its high claims to the fostering care of every one who is a true American at heart, we commit it to the nurturing of our countrymen, un-

der the fond belief, that it will be received in kindness and cherished with patriotic care.

We were highly gratified on Friday last in viewing two fine animals, purchased by *Robt. A. Taylor*, esq. of this city at the recent sales of Durham cattle in Philadelphia. The first, *Enchantress*, is a fine 2 year old roan heifer, in calf, imported by Mr. *Whitaker*, and sold at the Powelton sale; she is of great size, and possesses as many fine milking points as we have seen in a single creature for many a day; and if she do not prove a generous contributor to the pail, we shall eschew all pretensions to judgment in cow flesh. The other is a yearling red and white heifer, with fleaky sides, and a most interesting white face: she is out of *FLORA*, the great "butter cow" of whose astonishing product we spoke last week, and by *Bos*, of whom we also spoke in the same article. She is of great size for her age, and though her points for deep milking are not so strongly developed as are those of *Enchantress*, who stood so proudly by her side, from her high breeding, and the fame of her ancestors on both sides of her house, we have no doubt she will do her part to perpetuate that good name to which they have such an indisputable title. We were, therefore, pleased to find that she had fallen into such good hands, as we are sure from the ability and disposition of her patriotic owner, that all that good keep can do, will be done for her. In compliment to her maternal relative, Mr. Taylor has called her *Flora the second*.

It always imparts to us emotions of unmingled delight when we see gentlemen of wealth appropriating a portion of their means to agricultural pursuits, because we look upon the products of the earth as furnishing the most substantial foundation of the nation's wealth and prosperity; as imparting to property its intrinsic value, and to labor its just reward. Indulging in these feelings, we hail with sentiments of pride and pleasure, the acquisition of Mr. Taylor to the fraternity of husbandmen, and the more especially so, as we have scarcely ever known a successful merchant, who did not make an enterprising and good farmer.

At Columbus, O. \$6½ pr cwt. is offered for hogs.

NATIONAL SILK GROWERS' CONVENTION.

To the Friends of the Silk Culture.

It having been determined at a meeting of the friends of the cause, held at Philadelphia on the 25th ultimo, in which the states of Pennsylvania, New Jersey and Delaware were represented, that it was important for the furtherance of the silk culture, that a National Convention be held at the city of BALTIMORE, on the second Tuesday, the 11th day of December next, it is therefore respectfully suggested, that the Silk growers, and those friendly to the introduction of this branch of industry into our country, take prompt measures to appoint delegates to represent the several sections of our union in said convention. The approaching meeting of Congress will afford the citizens of distant States an opportunity of being represented in that body by their representatives in Congress, and it is therefore submitted to the consideration of those friendly to the cause in those states to avail themselves of the opportunity which will be thus afforded of being so represented.

The spirit which now animates the American people in favor of this enterprise, seems peculiarly to call for a measure of the kind, as it is obvious that a body of practical men coming together from the remote parts of our country, will be able by their united counsels to lay before our countrymen a vast body of important facts and suggestions, and thus enable them to proceed onward in their holy work with intelligence and zeal.

As the time allowed for the meeting of this Convention is short, it is earnestly requested of the friends of the measure, to go to work immediately and make appointments of delegates, as it is of great moment that every section of the country should be fully represented.

✂ Persons having specimens of cocoons, raw silk, sewing silks, or articles manufactured from American raised silk, are requested to send or bring them with them. Those who may have invented reels, looms, or other implements for the preparation or manufacture of silk in any of its forms, would find it to their advantage to exhibit them at the Convention, as all such articles will command deep and profound interest from its members, and serve by familiarizing them with their respective uses and operations, to give confidence in the feasibility of fabricating silk goods, and thus confer upon the country the most lasting benefits.

✂ Newspaper editors throughout the country are respectfully requested to insert this notice, and use their influence with their readers to secure prompt and efficient action in the premises.

The U. States is the second commercial nation in the world.

AGRICULTURAL FAIRS AND SALES OF STOCK.

Reported for the Philadelphia U. S. Gazette.

AGRICULTURAL EXHIBITION.

The Philadelphia Society for promoting agriculture, held their Exhibition of Cattle, &c. at Elliott's tavern, Lancaster turnpike, yesterday. Owing to the unfavorable state of the weather it was not as fully attended as was expected by our own citizens, although we perceived on the ground a number of gentlemen from bordering states, who had contributed to the exhibition by presenting some of the best of their valuable stock. The show of Durham Cattle was excellent, and has rarely been surpassed at any similar exhibition in this vicinity. Among the best were Col. Wolbert's stock, headed by his imported bull "Colostr," followed by a large number of superior cows and calves, imported, and of his own raising—next came John Barney's, at the lead of which was his bull 'Defiance,' one of the most beautiful as well as weighty animals on the field, together with a number of excellent Durham cows, heifers, calves, and a full pen of his truly celebrated Bakewell sheep. Mr. Samuel Canby of Wilmington, also presented his imported bull "Maxwell," that brought such a large sum a year since at public sale in this city, as also his imported cow Dulcibella, not surpassed by any on the ground either for milk or meat. R. Penn Gaskill, esq. and Thomas Rotch presented two fine Durham bulls—the latter gentleman had also two pigs of the Chinese breed on the ground, that in scarcity of hair, rotundity of form, and peculiarity of face, bore a striking resemblance to a Chinese Mandarin. Col. Philip Reybold, President of the New Castle county Agricultural Society, exhibited several of his imported Leicester Sheep, that reflect credit upon his liberality and judgment as a breeder of good stock. Mr. Allen A. Roberts exhibited a fine bull of the Durham, Devon and Holstein stock—Mr. John Purcell one of the pure Holstein strain—Mr. P. H. Coulter, one of the Durham and Holstein—Mr. John Supplee, one of the Alderney stock—and Mr. Kenderton Smith, J. W. Roberts, W. W. Barber, Samuel Ott, and Samuel Ovenshine, a number of excellent cows, steers and calves of the Durham, Holstein and cross-breeds. Mr. J. W. Roberts presented some fine South Down and Bakewell sheep. Mr. A. S. Roberts, an English sow of the small bone breed, and Lewis Bennett, jr. a boar of the Berkshire breed. There was also a good display of horses, among which we noticed General Irvin's "old Busiris," and Thomas Massey, jr.'s "Bell Founder" from New Castle county, Delaware—as also several excellent breeding Mares. There were also two or three fine imported Jacks and Jennets on the ground, and a number of Agricultural implements of new invention—among which we noticed, particularly, a new fashioned plough for two furrows, an excellent implement for the cultivation of corn, &c. The premiums awarded by the committee will be found below.

PREMIUMS, &c.

The Philadelphia Society for promoting agriculture, presented the following premiums for stock owned in Pennsylvania, and certificates of distinction for animals from other States, yesterday

morning at the place of Exhibition on the Lancaster turnpike. There was a large assemblage present, and the sale that occurred immediately afterwards, some particulars of which will be found below, was numerously attended.

The Committee on neat cattle, consisting of Jas. Thornton, Geo. W. Roberts, Philip Reybold, Aaron Clements, and Dr. Jas. Mease, made the first report, and awarded the premiums presented below:

For the best imported bull, above 1 year old, the premium of \$10 was awarded to C. J. Wolbert, for his white Durham bull Colostra, 2 y. old.

For the second best imported bull, \$5, to Tho. Rotch, for his bull Bruce, 2 years old.

For the best native bull above 1 year old \$10, to John Barney, for his bull 'Defiance 2d.'

For the second best native bull, \$5, to Jas. Andrews, for his bull Austerlitz.

For the best native bull calf, from 4 to 12 mos. old, \$5, to C. J. Wolbert, for his calf Roderic, from his imported cow.

For the second best native bull calf \$3, to Th. Rotch, for his calf Cecil.

For the best imported cow \$10, to Dr. Uhler, for his cow Cato, 6 years old.

For the second best do. \$5, to C. J. Wolbert, for his cow Isabella.

For the best native cow \$10, to A. S. Roberts, for his cow Queen of Chester.

For the second best \$5, to C. J. Wolbert, for his cow Glenfield Lass.

For the best imported heifer, above 4 months old, \$5, to Dr. Uhler, for his heifer Marion.

For the second best do. \$3, to C. J. Wolbert, for heifer Cinderella.

The committee also awarded an honorary premium of \$3 to John Barney for his heifer Bright Eyes.

For the best calf under 4 months old, \$5, to Joshua Longstreth, for his bull calf John Bull.

For the second best do. \$3, to Fred. Haines of Marietta, Pa.

For the best steer for slaughter \$10, to Isaac W. Roberts, of Montgomery county, Pa. for his half blood, 3 years old.

For the second best do. \$5, to Isaac W. Roberts, for his Dunn steer, of 2 years and 8 months old.

The committee on Horses, composed of Messrs. R. M. Huston, John S. Vansant and Robert T. Potts, awarded the following premiums:

For the best stallion \$10, to Gen. Irvine, for his horse Busiris.

For the second best \$5, to T. B. Jacobs for his imported Arabian horse Ibrahim Pacha, imported by Com. Elliott.

For the best breeding mare \$10, to R. C. Hemphill, for his grey mare Cicerone.

For the second best do. \$5, to Geo. W. Roberts, for his bay mare Doll.

For the best colt not more than 3 years old \$5, to John Cochran, for his 2 year old sorrel horse colt by Busiris.

For the second best \$3, to Geo. W. Roberts, for his one year sorrel colt, also by Busiris.

For the best Jack \$5, to Andrew Young, for his large 5 year old Spanish Jack.

The committee on Sheep and Hogs, composed of Messrs. Thos. Walmsley and Ralph Eddowes, awarded the following premiums:

For the best imported ram \$5, to John Barney for his Bakewell ram.

For the second do. \$3, to Isaac W. Roberts, of Montgomery county.

For the 4 best ewes \$8, to John Barney, for 4 of his Bakewell stock.

For the 4 second do. \$4, to I. W. Roberts, for 4 of the Southdown stock.

For the 4 best lambs \$5 to do.

For the 4 second do. \$3, to Wm. Barber, of Delaware county.

The committee also presented, as entitled to a "certificate of distinction," three ewes and one ram, of the Leicestershire stock, exhibited by Major Reybold, of New Castle county, Delaware; and as worthy of special notice, a lot of fine sheep belonging to R. A. Parrish, of the 'Southdown,' and crosses of the 'Southdown' and 'Merinos,' as also 13 head of an excellent quality, exhibited by Wm. Barber.

There was no competition in swine, but the committee awarded to Mr. Bennett, a premium of \$3 for an imported boar; and to A. S. Roberts, a premium of \$3 for an imported sow of a superior kind.

The following are a portion of the sales of Durham stock, made yesterday by Mr. Wolbert at the above exhibition:

Bruce, recently owned by Thos. Rotch, bought by Mr. Horner for \$500.

Defiance, recently owned by J. Barney, bought by J. Maxwell for \$200.

Defiance 2d, recently owned by John Barney, bought by Jas. Latta for \$300.

Bos, bought by Mr. Ellis for \$200.

Flora, known as the celebrated "Butter Cow," formerly owned by Hon. C. A. Barnitz, York, Pa. bought by C. J. Wolbert for \$360. Flora's calf was bought by Mr. Harvey for \$100.

Durham Beauty, bought by Mr. Beltzhoover of Baltimore for \$400.

Bright Eyes, bought by Mr. Walker for \$200.

May Flower, do do for \$200.

Daphne, bought by S. Canby, of Wilmington, Del. for \$200.

Beauty, do. for \$200.

York Belle, bought by J. Maxwell, for \$250.

Dulcibella, recently owned by S. Canby, bought by Mr. Maitland for \$185.

Vermillion, bought by Dr. Matlack for \$150.

Fanny, bought by A. S. Harrison for \$150.

SALE OF DURHAM SHORT-HORNS.

Mr. Whitaker's second sale of improved Durham Short-horns, lately arrived from England, took place previous to the exhibition at Powelton, and was well attended.

Col. John Hare Powell, as the friend of Mr. Whitaker, who resides in England, stated previous to the sale, that that gentleman had imported the animals that were offered, more for a desire to extend the breed of this valuable stock, than from any prospect of gain—that three of the importation had been killed on the passage, during a storm, and that he should reserve one bid for Mr. Whitaker, which should be made public, and

that the sale should be a bona fide one, and no bidding in—terms cash.

The bidding was sharp, and all offered, of the cows, except one, were sold; that one, Atkinille, was bid in by Col. Powell at \$450. The following are the names of the cows, their age, and price, with their purchaser's names and residence:

Dairy Maid, 3 years, \$540, Jas. Gowen, esq. Philadelphia county.

Victoria, 3 years, \$520, George Brinton, Chester county, Pa.

Nunna, 3 years, \$500, C. Warwick, of Richmond, Va.

Viviana, 3 years, \$530, W. Heysser, of Chambersburg, Pa.

Thornville, 3 years, \$590 do do

Lady Whitworth, 2 years, \$530, C. Warwick, of Richmond, Va.

Lobelia, 2 years, \$400, Wm. S. Torr, Philadelphia county.

Enchantress, 2 years, \$500, R. A. Taylor, of Baltimore.

Minerva, 2 years, \$360, Dr. Noble, of Philadelphia county.

Sarah, 2 years, \$380, Mr. Beltzhoover, of Baltimore.

Two of the bulls were offered, but there appearing no anxiety among bidders, were withdrawn.

THE CATTLE SHOW.

At the cattle show held in this place on Wednesday, the 10th inst. the following premiums were awarded, viz.

Jacob Harbaugh, best stallion, [Messenger,] \$5
Joshua Chandler, best crop of wheat, 36½ bus.

to the acre, 5

Solomon Rinehart, best crop of barley, 5

L. B. McLane, best plough, left hand self shar-

pener, 5

Laherd Ferroll, best bull, 4

do do best steer, 4

Jacob Harbaugh, best hog, 2

Amasa Fisher, best crop of potatoes, 191 bus.

on 105 perches, 3

Zadok Street, best piece of flannel, 3

The premiums on ruta бага and corn were postponed until the 3d Saturday in November next.

There were several articles exhibited not embraced in the list of premiums, among which was a fine Jack, by Chalkly Harris.

The number of persons in attendance, as well as the interest manifested, gave earnest of the improvement in agriculture which must result from the existence of Agricultural Societies.

The semi-annual meeting of the society will be held at the court-house in New Lisbon on the 3d Saturday of November, at 10 o'clock, A.M. when several addresses on the subject of agriculture are expected to be delivered. A general attendance of the citizens of the county is requested.

New Lisbon, Ohio, Oct. 15, 1838.

NEW WHEAT.—A specimen of extraordinary new wheat was exhibited at Mark-lane, England, on Monday, which was entitled the "Donna Maria superb." A single ear of this wheat weighs as much as three or four of the common prolific wheat, and it is calculated cannot produce less than fifteen or sixteen quarters per acre.

From H. Colman's Essay on Spring Wheat.

MANURE FOR WHEAT.

Land among us can seldom be found too rich for wheat; but the enriching manures may be applied in too great quantities; or at an improper time. The feeding of plants is as imperfectly understood as the feeding of animals. As with animals so with plants, we know that they cannot live without food, and their vigor and fruitfulness depend much upon the quantity and quality of their food. But how it is taken up, and by what means elaborated and distributed, remains as yet, in a great degree, among the deep secrets of nature.

Manures are of two kinds; putrescent, animal, or such as are supposed to furnish directly the food of plants; or active, such as excite either the organs of the plant to receive, or the powers of the earth to prepare, this food to be received, or by themselves educe from the substances, with which they come in contact, the means of sustenance and growth for the vegetables to which they are applied. The former class consists of animal or vegetable substances in a state of putrescence or decay, the latter, of mineral substances capable by their action of rendering these vegetable and animal substances soluble and receivable.

I shall go little into any theory of vegetation or of the operation of manure. Many theories have been framed, but no one so demonstratively established, that none other can be substituted in its place, after further inquiries shall have made us better acquainted with these mysterious but profoundly interesting operations of nature. Facts established by repeated experiments are mainly to be relied upon. The application of green and unfermented manures has always been prejudicial to wheat crops. We know that the food of plants cannot be taken up unless it is reduced to extreme fineness or rendered soluble. This is applicable to all plants. If green and unfermented animal or putrescent manure be applied to wheat, it is always advisable to plough it deeply, so as not to be reached by the roots of the plant until it has undergone some degree of decomposition. If, however, the manure be completely fermented and decomposed, it may then be safely applied, by being spread on the ground and harrowed in. It is desirable, however, in general, that the manure should be applied to the crop which precedes the wheat.

Lime.—The presence of lime in some degree in the soil seems essential to the growth of wheat, and in a degree to the perfection of any plant. A very minute portion of lime is always found in the wheat plant.—Some portion of lime likewise is found, it is believed, in all soils, excepting those composed entirely of decayed vegetable matter like peat, or of pure silex or sand. In the most productive soils for wheat, lime is found in the form of a carbonate; and the permanent value of a soil for grain crops may be in a degree determined by the presence of lime. In Europe the analysis of the best of soils gives 25 to 30 per cent of carbonate of lime. We shall soon be favored with the analysis of the soils of our own State from our learned geological surveyor.

Lime is not however the food of plants. It is not a mere stimulus to the plant. The most reasonable theory is, that it causes the dissolution

of other substances in the earth; and prepares them to become the food of plants, or to yield that substance which constitutes their food. As lime itself does not constitute the food of plants, this explains why lime alone does not enrich a poor soil; and why, where it has been applied to excess and without the addition of other manures, it for a time impoverishes a soil.

A new theory of vegetation has been suggested by some distinguished European philosophers; which professes to approach nearer to a solution of this great mystery than has yet been reached. "A new substance has been discovered in all soils and manures, which is denominated *humin* or *geine*. It has been found likewise in all barks, in saw-dust, starch, and sugar. Humin is a substance not unlike carbon, for which it has hitherto been mistaken. It combines with the salts and forms the humic acid. There is a strong analogy between humin and other nutritive substances, such as gum or fecula. It forms a humate with an alkali, which is very soluble in water. All substances, which contain carbon are dissolved in the water of vegetation through the means of humin; and the dissolved mass is taken up by plants as food. Humin in combination with lime, ammonia or potash also becomes soluble in soils or dung. Humic acid and carbonic acid gas, mixed with water, according to this discovery, constitute the chief food of plants. Every description of manure is only valuable in proportion as it contains these substances."

Such is the modern theory of vegetation, which is in itself plausible, but which will be further tested by the lights of chemical science; from which examination the best results to agriculture are to be expected. Lime causes the evolution or extraction of this matter from various substances. Potash leads to similar results, and with more power than lime and bone manure; and night soil and all animal manures are supposed to furnish a humin or geine in abundance. In respect to night soil or human excrement, a discovery has been made in France, which promises valuable results.—The charcoal procured from burning wood, peat, or coal in close vessels has been mixed with it in the form of fine powder, which operate to disinfect it of all offensive odor, and reduce it to a powder, which is portable and may be easily distributed. I have seen this process perfectly effected in the course of half an hour. Manures in a decomposed and fermented state are said to supply this humic acid much more abundantly than in a crude or fresh state. In what precise condition they are best applied must be matter of further inquiry and experiment; and depend somewhat on the mode of their application. If designed to be spread broadcast and ploughed in, experience seems decidedly in favor of applying them in a green and unfermented state; but it is as well decided that green and unfermented manure should never be brought in immediate contact with the roots of a growing plant.

The rules for the application of lime to the soil are of more immediate importance to the farmers than any further discussion of the theory of their operation.

Limes are found of various qualities from their different measures of combination with siliceous, argillaceous, or magnesian earth. Magnesia is found combined with some of our limestones in

considerable quantities, and when in greater amount is deemed prejudicial to vegetation. The quality of our various limestones is of great importance; and this will soon be furnished to us by the highest authority. Lime may be applied to soils for two objects. The first, to make a permanent change in the nature of the soil, as for example, to render a clayey soil less adhesive, and make it friable. In this case a very abundant application would be required; and at the present prices of lime and of land would be an experiment not likely to be undertaken by many of our farmers.

The second object is to afford immediate aid to vegetation. In this case, if we had means of reducing the limestone to a fine powder without calcination, it might at once be advantageously applied, and with permanent benefit. This has been done by an intelligent observer in West Stockbridge. He has obtained the ground stone in the form of a fine powder from the mills and shops for sawing and planing marble. The usual form in which lime is to be applied among us is in a calcined state, and with a view to its immediate effects. In order to apply it advantageously, it must be either air slaked with water in the field, and distributed immediately while warm; or mixed with mould, in the proportion of one bushel of lime to five of mould, and spread in that form; in which latter form it is, perhaps, more likely to be equally diffused. It may be mixed with peat earth; but in this case it should be allowed a considerable time for fermentation, in order to render the vegetable matter of peat soluble, and to extract from it the proper food of plants. But it must not be mixed with animal or putrescent manure. Its effects in such case are to destroy the animal matter, and leave only the woody fibre.

The effects of lime, whether applied in a caustic or an effete state, either air slaked or water slaked, are not very different.—The heat imparted to the soil by its application when warm would undoubtedly be to a degree beneficial. It should be applied on the surface of the soil, and merely harrowed in. It has a constant tendency to sink into the soil; and its operation is wanted in the vegetable mould, which is at the surface. In regard to the quantities to be applied there are great diversities of practice. In England, upon soils comparatively destitute of calcareous matter, from 100 to 600 bushels have been applied, the last quantity, however, with injury to the land for some time. The English consider that 300 bushels are ordinarily a proper dressing for an acre, and this is applied at once; very much larger quantities have been applied, but the advantages of such copious liming are not always a compensation for the expense.

The French and the Germans, of late especially, have been highly successful in the application of lime. The practice of the former differs from that of English agriculture; but its advantages have been fully tested. They recommend the application of about 12 bushels per year, annually, for three years in succession, or 40 bushels applied at a time once in five years. This is deemed ample. In this case is probably intended 12 bushels of unslaked lime, the bulk of which in the form of a hydrate, or slaked with water, is more than doubled. The plants on an acre will not take up a sixth of this quantity; but much of it is

lost by gradually sinking into the soil, or goes to its permanent improvement. The French method rests upon the highest authority of science and actual experiment; and may be commended to our farmers.

Marls, which contain a good proportion of lime, are of great value in ameliorating soils; and operate in improving soils and supplying calcareous matter, though not in the active and immediate manner in which lime operates. Their application, however, is considered by many as preferable to lime. On this subject we want more experience. The Berkshire shell-marls, which have been recently discovered, contain from 80 to 90 per cent. of lime. The operation of shell-marl, or marl containing a large amount of shells in a state of decomposition, is much slower than that of quick lime; but its effects are quite lasting. When applied to heavy soils and soils naturally cold, it enriches vegetation, but does not forward it.

Potash, or vegetable alkali, is stated to be of more value than lime in producing the humin which is deemed the essential food of plants. Some deem it at a much higher rate. It has been applied at the rate of from 50 to 100 lbs. to an acre; and, as stated, with great success: but I have no knowledge of any such decisive experiments as would justify me in speaking with confidence of its effects, or the mode of its application. Mr. Williams's great crops of wheat have been assisted by fifty bushels of wood ashes spread to an acre; and a good crop of wheat seldom fails to be obtained on newly cleared and burnt land. The potash is here present in large quantities.

Leached ashes and Soapboilers waste are esteemed a most valuable manure. A good deal of lime is ordinarily mixed with them; and they abound in vegetable alkaline matter, which is highly favorable to the crops. They should be spread on the surface, and harrowed in. From fifty to one hundred bushels can be safely applied to the land, though few farmers will feel that they can afford the application at the prices at which they are at present held. I have used them with great advantage, and one great advantage from the use of bone manure and ashes is that they do not introduce weeds into the soil. The farmers on Long Island often import leached ashes from N. England for their wheat lands; and, as they say, with much advantage. They must not be too often repeated on the same land.

Bone manure, in the form of dust, or small pieces and dust intermixed, is a most valuable manure. It contains a large proportion of the phosphate of lime, which has always proved a most efficient aid to vegetation. Forty bushels of crushed bones, or twenty-five bushels of bone dust, to an acre, have been found as efficient as a much larger quantity; and no advantage whatever has come from doubling this amount. Bone dust mixed with ashes has been highly efficacious. The best mode of application is to mix them with mould, or barnyard compost; and if for grain crops spread and harrow them in lightly; but it is essential that they should undergo a degree of fermentation before they are applied to the land; and that the land to which they are applied should be dry. The lands on which bone manure has been found efficacious has been light, dry, and sandy soils:—upon clayey or heavy soils it has not been useful. If for immediate effect, the bone dust is to be pre-

ferred; if for permanent improvement, the crushed bone. At the only mill known in Massachusetts, which is at Roxbury, the manufactured article contains a good deal of the dust intermixed with the crushed bones. It is sold here, we understand, at 35 cents per bushel, and large quantities are on hand to be supplied.

The application of lime, too, should never be made but in dry weather, and when the land is dry; as otherwise it is apt to be formed into a mortar, which is not easy of solution. Lime applied in any form to the land, it is to be remembered, is not an enricher of the soil; and therefore, if lime alone should be applied for succession of years, and all putrescent or vegetable matter be omitted, the land would be losing instead of advancing in fertility. It is merely a preparer or evolver of the food of plants.

Gypsum has not been found of any apparent value to wheat.

Saltpetre. Another manure, never, we believe, used in this country, from foreign accounts deserves a trial. This is saltpetre. It has been used at the rate of one cwt. to the acre, finely pulverized, and sown broadcast upon the growing crop; and its beneficial effects upon the plant are stated to have been remarkable, especially in its effects upon the straw. It is to be used, however, with caution, as not having been sufficiently tested.

BURLINGTON.

Mr. Editor—I have just returned from a visit to our little sister city of Burlington. In my early days, it was as quiet as the classic region of 'Sleepy Hollow,' but now it is all bustle and excitement—and I felt not unlike the renowned Rip Van Winkle, when he stood unknown amid the scenes of his nativity, and scarcely understanding the language of those about him. I heard a great talk about mulberry trees, and in fact that was the most that I did hear. At length I ventured to observe to one near me, that an old mulberry tree used to stand at a certain place which I named, which bore excellent fruit, and that I had gathered it many a time when I was a boy. All stared, and some smiled, at length after a slight pause, the gentleman to whom I had addressed myself said to me, 'Sir, that is not the kind of mulberry tree we grow here; we were speaking of the *morus multicaulis*, or Chinese mulberry.' 'Indeed,' said I, 'does that bear a fine fruit?' This question produced a broad grin from the whole audience, and the speaker informed me that the tree did not bear any fruit; and added, that he supposed I had come from a great distance, as I appeared to be entirely ignorant of the '*morus multicaulis*.' 'It may be so,' said I, 'but if you don't eat the fruit of a tree, I should like to know what part of it you do eat?' 'Oh,' said he, 'we raise the tree to feed worms, and make silk.' A new light broke in upon me, and I found that the inhabitants of my native town had become silk growers. I determined to inform myself more particularly on the subject, and accordingly I paid a visit to Mr. Cheney's place, which is about a mile from Burlington, and there I saw groves of the much-talked of *morus multicaulis*, expanding their broad and beautiful leaves to the sun, and yielding their luxuriant foliage to that curious little operator, the silk-worm. I saw al-

so a reel invented by one of the Mr. Cheney's, simple, but very ingenious, by which the cocoons are speedily converted into fine and beautiful silk—and from enquiries which I made then and since, I have no doubt that silk will be successfully and profitably manufactured in our country. I was also at the cocoonery of Mr. Costill, near Burlington, which, though not so large as that of Mr. Chesney, is conducted with great neatness and entire success; and derived additional interest in my view, by being placed in the midst of a splendid peach orchard of some two thousand trees, whose luscious fruit was blushing and bowing all around me.

In short, I left Burlington as fully under the influence of the 'mulberry fever,' and 'silk mania,' as any that I found there; and with a firm belief that that ancient and beautiful city will at no distant day, be the scene of a great and successful enterprise—and that the 'silk business,' will prosper in our land.—*Philadelphia U. S. Gaz.*

From the Philadelphia Saturday Courier.

THE AMERICAN SILK BUSINESS, AND CULTIVATION OF BEET SUGAR.

Our readers well know that we have looked upon the successful introduction of the silk culture as a matter of national importance, and have hence sought to present them with the plain facts in relation to the business. Surprising as it may appear, there are still those who profess to entertain doubts as to the successful cultivation of Silk in this country, and who attempt to discourage the efforts now making to retain the immense wealth among our own farmers and citizens, which is now sent abroad to encourage foreign labour and enterprise.

One frequent objection which we hear offered, is that "there are too many going into the business." There are enough in the business now, perhaps, to produce a quarter of a million of dollars worth of Silk, while we want enough, and will have them, too, to produce the twenty million dollars worth of Silk now annually imported, in addition to the millions which this country will ere long export.

THE TREES.

Another exclaims against the high price of Trees, not considering that the price of every commodity must naturally be regulated by the scarcity and demand. So with the Silk Trees. There is a great scarcity, compared with the immense and increasing demand for Trees, and as a consequence they must maintain a high price until the country is supplied. As has justly been observed, the high price is not the effect of speculation, but is consequence of the demand for Trees by those who intend to raise the Silk. If the trees cost 60 cents, they will not stand the grower the first year more than 5 cents a plant, and the second comparatively nothing. The people are becoming awake to their interests; it is only necessary for them to be correctly informed upon the subject, and in a very few years the quantity in the country is not one seventh of what is actually required. There are seven States in the Union that are admirably adapted to the culture of Silk, and the whole number of Trees now in the country would scarcely supply one State.

THE WORMS.

That the feeding of the Worms and production of silk is keeping pace with the planting of trees, is evident from the fact that the price of eggs has advanced from \$10 to 40 per ounce, as well as from the number of worms fed, of which we are now able to adduce the following instances:

Mr. McLean, at Freehold, N. J., has the past season fed over 100,000; Mr. Jerome, at Princeton, 1,000,000; Mr. Strong, of Philadelphia county, 800,000; Newell & Co., Ellington, Ct. 500,000; Jenks & Co., Frederick, Md. 100,000, and will next year make 500 pounds Silk; a gentleman in Zanesville, Ohio, 200 bushels cocoons; Mr. Waples, Daysboro, Del. 1,000,000; M. Dyer, Frederick, Va. a large number; Mr. Pierce, Chesnut Hill, Pa.; M. Stone, in connection with Senator Wall, N. J.; Judge Vandyke, Princeton; Chaffner & Co. ditto; Harper & Rogers, Allentown, Pa.; a company at Columbia, Pa.; another at Warren, N. J.; and others thro' the Southern and more particularly the N. E. States, have all succeeded in producing large quantities of cocoons, and invariably of an excellent quality.

THE MANUFACTURE.

Well, say those who are determined to persist in undervaluing American skill and enterprise, you can raise the cocoons, but nothing more. The Westchester Silk Company sold 25 of their silk handkerchiefs at from \$1 75 to \$3 each. The Lancaster Silk Company presented the Editor of the Journal, at that place, with specimens of reeled Silk "very beautiful, being even, of fine texture and glossy appearance." Messrs. Whitmarsh & Co. have looms in operation, which weave in beautiful style fourteen pieces of ribbons at the same time.—At Economy, Pa., are manufactured sewing silk, vesting, pocket handkerchiefs, and dress pieces, of the very best quality. At a single town in Connecticut upwards of \$75,000 worth of Silk is annually manufactured. Three young ladies on Long Island, N. Y. cleared this year \$3500, by Silk manufactured in their own house, from worms raised by their own hands.—Yet in spite of these and hundreds of other facts that might be adduced had we space, we find people expressing opinions unfavourable to the Silk business in the United States.

It should, however, be a matter of no surprise that this great national business encounters the opposition of those who are ignorant of its merits, from not having given it their consideration. The great Erie Canal, that grand pioneer in a series of magnificent internal improvements, which all now see the incalculable value of, was scouted, sneered at, and ridiculed as a piece of worthless extravagance and folly, utterly impracticable, and equally useless if it were practicable. It is so now in reference to the Silk business in the United States, which, like the Cotton of the South, will nevertheless grow up from small beginnings until it rivals in importance that staple. In 1818, there were exported from a single Southern State, Cotton to the amount of only 7000 bales, and in 1837, from the same State, the enormous increase of 250,943 bales, and the number of bales exported from the South during the last year, was one million four hundred and twenty-two thousand bales, and it is in this ratio that the produce of raw silk is destined to increase in this country. The distin-

guished American Philosophical Society presented to the Legislature of Pennsylvania, and to the Congress of the United States, each, a splendid flag of American Silk, twelve feet long and six wide, reeled, coloured and wove in this City, and which were conspicuously displayed in our halls of legislation. We also refer to the reports of legislative committees of this and the several states, who, after due investigation, have given the business their highest and most unequivocal sanction. To close a newspaper notice, which might readily swell into a volume, so abundant and satisfactory are the materials, we refer any individual who entertains a doubt on the subject, to the following extracts from the report of a Committee of Congress, at its last session who, at great pains, gathered their information from the various sections of the Union.

The Committee on Agriculture, who were instructed to inquire whether any, and, if any, what encouragement may be given to promote the culture of the Mulberry and the Sugar Beet report: That, in order to obtain satisfactory information of the present state and condition, as well as of the importance, of the culture of the Mulberry and the Sugar beet, they issued a Circular on the subject, shortly after it was committed to them, to which they have received numerous answers, giving much interesting and useful information; some of the most important of which the committee append to this report. The first question which naturally suggests itself is, whether the subject matter is of such national importance as to merit the serious attention of Congress; and in order to satisfy themselves on this point, the Committee ascertained from public documents the amount of Silk and Sugar imported into the United States, as follows, viz:

	SILK.	SUGAR.
1836	25,033,200	12,514,515

This statement at once shows the immense sum which is annually paid by the people of this country, to foreign countries, for those two articles only; and also, the very great importance of encouraging their culture amongst ourselves.

* * * * *

It would introduce to the farmer new and valuable, and, as your Committee believe, profitable productions; which, in rotation with other crops, would have a doubly beneficial effect on our agricultural interests. It would improve our lands, increase the amount of productive industry, and condense, improve, and enrich our population. It would be adding other branches to the home, the fire side business of every family, and thus increase the pleasure as well as the prosperity of the domestic circle.—Your committee cannot forbear to notice with approbation, on this occasion, the fact that Mr. Lindsay, of Washington City, has frequently conferred with them on this subject, imparting his valuable information, enforced by the practical argument of his wearing a *complete suit of domestic silk*, cultivated and manufactured on his own premises.—There is in this, as in every country, a large class of individuals who, so far from adding any thing to the industry and wealth of the nation, are unable to support themselves, for want of suitable employment, such as indigent females and children; the aged and infirm, to whom may be added the long list of paupers in

our poor-houses and asylums, and of prisoners in our workhouses and State Penitentiaries. To this class, the cultivation of silk presents a most suitable and advantageous employment.

Within the last year, the cultivation of the Mulberry has been much more extended than in several preceding years, and the people and the Legislatures of several of the States have taken up the subject with increased spirit and vigor.

From all the information which the committee have been able to obtain, they are induced to believe that no country in the world is better adapted to the production of Silk, or the Sugar beet, than most parts of the United States, whether we consider the soil, the climate, or the habits of the people. The Mulberry will grow on high, stony, sandy, and comparatively barren land; and although the poverty of the soil may decrease the quantity of foliage, it will improve the quality, and add fineness and beauty to the silk, whilst the climate is so varied, that no part is too far north to destroy the Mulberry or prevent the production of a single crop of silk worms in a season, yet, in the Southern part of the Union, from eight to ten crops may be raised.

The *Morus Multicaulis* has for some years been considered the most valuable variety of mulberry; though the *Brussa*, recently introduced into this country from Turkey, is highly spoken of as of a superior quality. The large white six-week worm seems to be generally admitted to be preferable for the production of silk.

If, then, there are so many inducements for the production of these two important articles, if the market is large and yearly increasing, our soil and climate adapted to the culture, and the prospect of public good and private gain be good; why, it will be asked, may we not become a great silk-growing and sugar-making people? We can, and the Committee believe in no distant time will, so become—It only requires that public attention should be called and kept to the subject; that our agriculturists be satisfied of a fair prospect of success; and that the Government should lend its aid to ensure the speedy and permanent success of the measure.

THE PROFITS.

From four hundred to one thousand per cent. is now realized on the cultivation and sale of trees. So enormous a profit is not of course expected to be realized for any length of time, but will decline as the trees become more abundant, and the country is stocked with silk plantations. But the producing of raw silk from those trees must become a permanent business, from which the farmer will be able to realize from three to five hundred dollars from each acre of mulberry trees.—The whole business is as simple as that of raising corn or potatoes, and more certain than any crop that can be put into the ground, while it furnishes a light, easy and profitable employment to children, to the aged and infirm, and other dependent portions of the household, with which every family is more or less burthened. In every way, the Silk culture is a matter of great individual and national importance, furnishing a certain, safe, and, it may be added, a patriotic source of wealth.

T.

A pearl valued at \$140, has been found in an oyster taken from the beds of the Delaware.

WASHINGTON CITY SILK COMPANY.

We are pleased to learn that our anticipations, expressed in a former notice under this head, are likely to be fully realized. From an intelligent gentleman, who attended the late meeting of the Silk Company, at the City Hall, and who takes a lively interest in the success of the enterprise, we have received the following satisfactory notice:

"The meeting of this company at the City Hall on Friday, the 26th inst. was very large and highly respectable. The committee appointed at the former meeting made a luminous report, which, together with a constitution for the government of the company, was unanimously adopted. Commissioners were appointed to open books for subscription to the capital stock of the company, nearly one-fourth of which has already been taken—This stock is divided into five hundred shares; of twenty dollars each, but may be increased whenever it is deemed necessary to do so. From the anxiety which seems to be manifested to participate in the enterprise, we should not be surprised if all the stock be taken up in the course of two or three days; upon which the officers of the company are to be chosen, and the operations of the company are to be commenced. From our knowledge of the gentlemen who compose the association, we cannot but anticipate the fullest and most complete success to this enterprise. The subscription books are now open at the office of the Collector of the city taxes, in the basement story of the City Hall, and no individual is allowed by the Constitution to subscribe for more than ten shares."—*Nat. Intelligencer*.

POTATOES—The apprehensions that were entertained in this city and its vicinity, some weeks ago, during the unprecedented drought, that this valuable vegetable would be almost unattainable, and at a most enormous price, during the fall and winter months, are not likely, we are happy to perceive, to prove well grounded. Through the enterprise of several of our merchants and citizens cargoes of excellent potatoes have been imported from the Eastern states, and especially from Maine, which are now selling at our wharves for seventy-five cents the bushel. To those who guessed that potatoes would be as high as two dollars or two dollars and fifty cents the bushel, and who calculated that they would be mighty scarce and mighty dear in these parts, the present importation of the first rate white mealy potatoes, (the best, it is allowed by competent judges, that have ever been imported into the District) is a most agreeable surprise and high satisfaction. And while, on the public account, we feel gratified, that, by means of this enterprise, a most valuable article of human sustenance is placed within the reach of all classes of the community, at a comparatively reasonable price, let us not be unthankful to those who have so successfully defeated the intentions of the huckster and the monopolist.—*ib.*

The Farmer.—Happiness seems to have fixed her seat in rural scenes. The spacious hall, the splendid equipage, and pomp of courts, do not soothe and entertain the mind of man in any degree like the verdant plain, the enamelled mead,

the fragrant grove, melodious birds, the sports of beasts, the azure sky, and the starry heavens.

It is undoubtedly the fact, that in proportion to our population, too many leave the occupancy of agriculture for other employment. If this arises from its being considered that the employment of the farmer is not respectable, it is a great mistake. Every thing is honorable which is useful and virtuous. This is an employment instituted by God himself, and by him particularly owned and blest. It is that on which every thing depends. True it is laborious; but then labor brings health, is the foundation of the farmer, is the condition of independence; his little dominion is his own, and he is not at the mercy of the public whim or caprice. It is not necessarily the case, in this happy country, especially, that the farmer must be a stupid ignorant man. He is taught in his youth the first rudiments of education, and has many spare hours to read. In the heat of summer's noon and by the long winter evening's fire, he has much time for his books, and in this country they are within the reach of all.

Farmer's evenings.—In one respect the farmer has the advantage of almost all other classes of the labouring community, his evenings he has to himself. While the mechanic has to labor from morning till nine o'clock in the evening, the farmer's day commences with the rising and setting sun. Although the industrious farmer finds many little jobs of work to which he very economically appropriates his evening leisure, yet the greater part of the long winter evenings he can appropriate to his amusement and his instruction. In no place do we see more cheerful countenances than around the blazing fire upon the farmer's hearth. There, at the merry apple paring, or at the neighborhood collection, or even in the family circle alone, do we find social happiness in its purest simplicity. What an opportunity is this for an acquisition of knowledge? What farmer who improves these opportunities can but be intelligent? And what instruction so interesting as that which gives him a knowledge of his own employment? Here we would suggest the importance of every farmer having a supply of agricultural books and papers. It seems to us that no one can be insensible of their utility. If this should be a suggestion of self-interest, which we do not deny, still we believe it coincides with the interest of the farmer. We will not enlarge on this subject, as we apprehend it will not convey that knowledge which we recommend. We will barely say, that we expect our subscribers to increase as the evenings lengthen.—*American Silk Grower*.

VIRGINIA FORESIGHT. The editor of the Norfolk Beacon has revived a curious document which sets in a prominent light the wisdom of the early Legislators of the ancient dominion. Nearly two hundred years ago the Colonial Assembly foreseeing the practicability and great importance of introducing and extending the culture of the mulberry tree for the purpose of establishing silk manufactories, passed an Act having that object in view. The date of the Statute is 1663.

An Act for Mulberry-Trees.

"Whereas, by experience Silk will be the most

Profitable Commodity for the Country, if well managed. And whereas the greatest conducement therunto required, is Provision of *Mulberry Trees*: Be it Enacted and Confirmed by this present Grand Assembly, That every Proprietor within the Colony of *Virginia*, shall for every hundred Acres of Land holden in Fee, Plant upon the said Land, Ten *Mulberry Trees* at twelve foot distance each from other; and secure them by Weeding and a sufficient Fence from Cattle and horses, &c. between this and the last of *December* 1663, and for every Tree that shall be wanting and untended in manner aforesaid, of the said Proportion, at the said last of *December* 1663, he the said Proprietor that shall be so delinquent, shall pay Twenty pounds of *Tobacco* to the public: Provided that this Act do not extend to *Orphans*, until the Expiration of Five years after their full age; and then if delinquent, to be liable as aforesaid; and no man planting more than his number, shall excuse any that hath planted less. Provided also that this Act extend not to such Proprietors as are not in actual possession. And because his Majesty hath taken particular notice of the great folly and negligence of the Country, omitting the propagation of so Noble and Staple a Commodity:

It is Enacted, That the Grand Jury do strictly inquire into the Breach of this Act, and make Presentment thereof, that the Offenders may accordingly be punished: And be it further Enacted, That for the encouragement of all Persons that shall endeavour to make Silk, there shall be allowed in the Publick Levy to any one for every pound of Wound Silk he shall make Fifty pound of Tobacco, to be raised in the Publick Levy, and paid in the County or Counties where they dwell that make it.

PEACH TREES.

As peach trees greatly exhaust the soil, it is probably the cause, in some measure, of the failure of crops. Cultivators would do well, occasionally, to remove the exhausted soil from around the roots of the trees, supplying its place with good earth. Coal dust from the blacksmith's forge, and wood ashes, are a valuable nourisher of the peach tree.—It is also said they are an antidote against the worm which preys upon the peach tree at the surface of the soil; and causes such a lamentable destruction of them.

The peach, also, at proper times, needs more pruning than any other tree, to keep it in luxuriant growth.

It has been asserted, as the result of an incidental experiment, that squashes sown in the fall will survive the frosts of winter and spring, and will mature much earlier than any which can be sown in the spring. It is worth a more satisfactory experiment. The earliest salads, we know, are grown in this way.

Young trees should not be planted where the decaying old roots are, as they are the receptacle of numerous worms, which seek their food in the roots of the young trees, and open the sap vessel, so that the sap instead of nourishing the tree, flows to waste in the earth, and causes the loss of the tree.

Deep digging is essential to the growth of young trees, in order that the rain water may filter under the roots, which otherwise would be rotted by

stagnant water remaining around them.—*Columbus Journal*.

LARGE SALE OF SUPERIOR STOCK.

The subscriber, in consequence of protracted illness, is reluctantly induced to offer his entire stock of *DURHAM* AND OTHER CATTLE at Public Sale on his Farm, in the immediate vicinity of *Marietta*, Lancaster county, Pa., on *THURSDAY*, the 15th day of November next.

The stock of *Durhams* consist of 46 head of different grades, from full-bloods to halves; the full-bloods include:

The celebrated *BULL BOS*, six years old, raised by Gov. Lewis of the State of New York. He was sired by *Wye Champion*, his dam *Brinda*.—*Wye Champion* was bred by Gov. Lloyd of Maryland; his sire was *Champion*, his dam *Shepherdess*. *Champion* and *Shepherdess* were imported from England. *Brinda* was bred by Mr. James Cox of Philadelphia; her sire *Chester*, dam *Corinna*—*Corinna* by *Bishop*, dam *Cora* an imported cow. A further and full pedigree will be exhibited at the time of sale.

BULL JUNIATA, full bred *Durham*, got by *Emperor*, and from a full bred Cow.

BLINKEY, three fourths *Durham*, bull calf, 5 months old.

Also, several *Durham* bull calves from one to three weeks old.

The superior Cow *FLORA* and Heifer calf, formerly owned by the Hon. C. A. Barnitz of York, Pa., and known as his celebrated butter cow; got by *Malcolm*, her dam *Julia*, bred by Mr. Buel—*Flora's* calf by *Juniata*.

White Rose, a full bred Cow by bull *Bos*, her dam by *Uge Comet*, great dam, full bred Cow derived from Mr. Powell's stock.

Red and white Heifer, one year old, by *Bos*, dam *Flora*.

White Heifer, one year old, by *Bos*, dam full bred.

Fancy Chinese Cow and Heifer Calf—calf by *Juniata*.

Also, a small Flock of superior South Down Sheep, full blood.

40 head of various sized Shoats.

4 Colts from 1 to 3 years old, two of which supposed to be full bred, sired by *Veto* and Count *Bertrand*.

Sale to commence at 10 o'clock, when the terms will be exhibited.

FREDERICK HAINES.

P. S. A part of the above named stock may be obtained at private sale, previous to the day of public sale.

Marietta, Pa. Oct. 26, 1838—nov 6 2t

DURHAM STOCK FOR SALE.

No. 1. *Matilda*, 3 years old, a dark mahogany bred or Devon color; she is out of a half Devon cow, by a full bred *Durham* bull, and now in calf by one. He price is \$60.

No. 2. *Beauty*, a handsome roan, 4 years old, fresh in milk, possesses the fine points of the *Durham*; she is half *Durham*, and her price \$75.

No. 10. *Snow*, a white heifer, with red neck and ears, 2 years old, in calf by a full bred *Durham* bull—price \$50.

No. 11. *Pink*, a whitish roan heifer, 2 years old, in calf by a full bred *Durham* bull—price \$50.

No. 12. *Cherry*, a half Devon cow, 7 years old, a fine milker, in calf by a full bred *Durham* bull—price \$60.

The above cattle are offered for sale by the subscriber, at the above reduced prices—terms, cash on delivery.—Applications made by letter to be post paid.

EDWARD P. ROBERTS,

no 5 3t Baltimore, Md.

GENUINE BARNITZ PIGS.

The subscriber has for sale the following pigs, which are warranted genuine:

2 pair 4 months old, and

1 pair 10 weeks old.

The *Barnitz* hogs are distinguished for their early maturity and size, attaining upon clover pasture from 250 to 300 lbs. when 12 and 15 months old. The price of the largest size is \$15 a pair; that of the smallest 10 a pair.

Applications by letter to be post paid.

EDWARD P. ROBERTS,

oc 30 Baltimore, Md.

FOR SALE,

COLUMBUS, a well bred race horse—his pedigree, which is perfect, will be given. Enquire of no 6 St EDW. P. ROBERTS, Ed. Farm. & Gard.

CHINESE MULBERRY TREES.

American Silk Agency, No. 5, Bank street, Philadelphia.

The subscriber having opened a permanent Agency for the purchase and sale of all articles connected with the culture and manufacture of Silk in the United States, offers for sale all the different varieties of *MULBERRY TREES*, suitable for raising the *SILK WORM*; viz: *Morus Multicaulis Alpines*, *Brussa Multicaulis Seedlings*, *Morus Expansa*, *Multicaulis Cuttings*, *Improved Italian Trees*, &c. Also, Cuttings from *Norton's Virginia Seedlings*, and *Cunningham's Prince Edward Grape Vines*. These vines produce an abundant crop of fruit, warranted not to rot or mildew and are fine for the table, and capable of yielding the finest wines.

S. C. CLEVELAND, Agent.

Those who may wish to enter into this profitable branch of national industry, will do well to call at the Agency, and see that they are well instructed in the value of the trees they purchase.

N. B. The particular attention of those engaged in the culture and manufacture of American Silk, whether of trees, Eggs, Cocoons, reeled or manufactured, is called to this agency. The Agent will give every attention to Sales, and prompt remittance of proceeds of any article sent to him. Those who may wish to purchase and enter in this valuable branch of home industry, can obtain from the agent every information, and also such articles as they may want without fear of deception.

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AGRICULTURAL IMPLEMENTS AND SEED SORE.

THE SUBSCRIBER informs the public that he keeps constantly on hand at his old establishment in Pratt-street, near *Hanover*, a large assortment of *PLOUGHS* and *Agricultural IMPLEMENTS* generally, which are too numerous to name in an advertisement, but invites such of the public who are in want of any articles in his line to call, assuring them that his work shall be as well made, of as good materials, and on as reasonable terms as any in the State. His patent Cylindrical Straw Cutters made on his late improved plan are kept at all times on hand, of various sizes and prices, with wood and iron frames—and he challenges its equal in any part of the world. Having an iron foundry attached to my establishment, all orders for *Ploughs* and *Machine castings* can be furnished at short notice and on reasonable terms.

In store—Herds and Orchard GRASS SEEDS, of prime quality; also, *Landreth's superior GARDEN SEEDS*. He is also agent for Mr. Samuel Reeves' Nursery, near *Salem*, New Jersey, whose fruit trees he can recommend to the public with confidence. Those wishing Trees from that Nursery this fall should hand in their orders immediately.

J. S. EASTMAN.

FOUR DEVON BULLS FOR SALE.

The subscriber has for sale 4 North Devon Bulls, of the purest blood in this country or Europe, having proceeded from the stock of the *Earl of Leicester*, a gentleman better and more advantageously known as Mr. *Coke* of *Holkam*, who before endowed with title by the present Queen of England, was by universal acclamation designated as the *Great Commoner of England*—and it has been universally conceded that one so illustrious by his acts could not be ennobled by the addition of a title.

The subscriber, without indulging in exaggerated praise, can conscientiously say, that he never beheld four more beautiful animals, and he, therefore, takes peculiar pleasure in recommending them to such gentlemen as may wish to improve their stock by a cross with this time honored race of British Cattle.

The North Devons are no less remarkable for their docility of disposition, than they are for their propensity to take on fat, and the richness of their milk. The Devon ox, as all know, are distinguished for the rapidity and elasticity of their step, as well as for their capacity to endure fatigue. As oxen, therefore, there is no other race that can compare with them.

The above bulls will be sold for 80 and \$100 each—they are 3 and 4 years old. Terms cash on delivery in Baltimore.

Applications by letter to be post paid.

EDWARD P. ROBERTS,

Editor Farmer Gardener,
Baltimore, M.

o 30

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every Monday

	PER	FROM	TO
BEANS, white field,.....	bushel.	1 25	—
CATTLE, on the hoof,	100lbs	6 50	8 00
CORN, yellow	bushel	81	83
White.....	"	80	81
COTTON, Virginia,.....	pound	9	11
North Carolina.....	"	9 1/2	11
Upland,.....	"	9 1/2	11
Louisiana — Alabama	"	11 1/2	12
FEATHERS,.....	pound.	45	50
FLAXSEED,.....	bushel.	1 12	—
FLOUR & MEAL—Best wh. wh't fam.	barrel.	10 00	10 50
Do. do. baker's.....	"	—	—
SuperHow. st. from stores	"	7 82	7 87
" wagon price,	"	7 62	7 75
City Mills, super.....	"	—	—
" extra.....	"	7 75	—
Susquehanna,.....	"	—	—
Rye,.....	"	5 50	—
Kila-dried Meal, in hhd's.	hhd.	19 00	—
do. in bbls.	bbl.	4 00	—
GRASS SEEDS, wholes. red Clover,	bushel.	—	—
Kentucky blue	"	—	—
Timothy (herds of the north)	"	—	—
Orchard,.....	"	2 00	2 50
Tall meadow Oat,.....	"	—	3 00
Herds, or red top,.....	"	90	1 00
HAY, in bulk,.....	ton.	12 00	16 00
HEMP, country, dew rotted,.....	pound.	6	7
" water rotted,.....	"	7	—
Hogs, on the hoof,.....	100lb.	8 50	9 00
Slaughtered,.....	"	—	—
Hops—first sort,.....	pound.	9	—
second,.....	"	7	—
refuse,.....	"	5	—
LIME,.....	bushel.	32	33
MUSTARD SEED, Domestic, —; blk.	"	3 50	4 00
OATS,.....	"	37	40
PEAS, red eye,.....	bushel.	—	1 12
Black eye,.....	"	1 00	1 12
Lady,.....	"	—	—
PLASTER PARIS, in the stone, cargo,	ton.	4 50	—
Ground,.....	barrel.	1 50	—
PALMA CHRISTA BEAN,.....	bushel.	—	—
RAGS,.....	pound.	3	4
RYE,.....	bushel.	90	93
Susquehanna,.....	"	—	none
TOBACCO, crop, common,.....	100lbs	4 00	4 50
" brown and red,.....	"	4 00	6 00
" fine red,.....	"	8 00	10 00
" wrappery, suitable	"	—	—
for segars,.....	"	10 00	20 00
" yellow and red,.....	"	8 00	10 00
" good yellow,.....	"	8 00	12 00
" fine yellow,.....	"	12 00	16 00
Seconds, as in quality,	"	6 00	—
" ground leaf,.....	"	5 00	8 00
Virginia,.....	"	4 50	6 00
Rappahannock,.....	"	—	—
Kentucky,.....	"	5 00	8 00
WHEAT, white,.....	bushel.	1 70	—
Red, best.....	"	1 65	1 67
Maryland.....	"	1 60	1 65
WHISKEY, 1st pf. in bbls.	gallon.	44	45
" in hhd's.....	"	43	—
" wagon price,.....	"	—	—
WAGON FREIGHTS, to Pittsburgh,	100lbs	2 25	—
To Wheeling,.....	"	2 50	—
WOOL, Prints & Saxon Fleeces,...	pound.	50 to 55	—
Full Merino,.....	"	45 50	—
Three fourths Merino,.....	"	40 45	—
One half do.....	"	35 40	—
Common & one fourth Meri.	"	35 40	—
Pulled,.....	"	30 33	—
POTATOES, 60 to 70 cts. a bushel.	—	—	—

A HALF DURHAM COW FOR SALE.

The subscriber has for sale a beautiful *fashionable roan* half Durham Cow. She is fresh in milk and only 4 years old. Her price is \$75. Applications, post-paid, to be made to
ED. F. ROBERTS.
 Who has also for sale several full bred Devons, males and females.

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BALTIMORE PROVISION MARKET.

	PER	FROM	TO
APPLES,.....	barrel.	—	—
BACON, hams, new, Balt. cured....	pound.	16	17
Shoulders,.... do.....	"	14 1/2	15
Middlings,.... do.....	"	14 1/2	15
Assorted, country,.....	"	14 1/2	15
BUTTER, printed, in lbs. & half lbs.	"	31	37 1/2
Roll,.....	"	25	31 1/2
CIDER,.....	barrel.	1 75	2 00
CALVES, three to six weeks old....	each.	5 00	6 00
Cows, new milch,.....	"	25 00	40 00
Dry,.....	"	12 00	15 00
CORN MEAL, for family use,.....	100lbs.	1 75	—
CHOP RYE,.....	"	1 50	1 60
EGGS,.....	dozen.	12 1/2	—
FISH, Shad, No. 1, Susquehanna,	barrel.	9 75	10 00
No. 2,.....	"	9 50	—
Herrings, salted, No. 1,.....	"	5 75	—
Mackerel, No. 1, ——— No. 2	"	12 50	—
No. 3,.....	"	—	7 25
Cod, salted,.....	ewt.	3 25	3 37
LARD,.....	pound.	14	15

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

	U. S. Bank,.....	VIRGINIA.
Branch at Baltimore,.....	do	Farmers Bank of Virgi. par
Other Branches,.....	do	Bank of Virginia,..... do
MARYLAND.		Branch at Fredericksburg, do
Banks in Baltimore,.....	par	Petersburg,..... do
Hagerstown,.....	o	Norfolk,..... do
Frederick,.....	do	Winchester,..... do
Westminster,.....	do	Lynchburg,..... do
Farmers' Bank of Mary'd, do		Danville,..... do
Do. payable at Easton,.....	do	Bank of Valley, Winch. par
Salisbury,..... 1 per ct. dis.		Branch at Romney,.... par
Cumberland,.....	par	Do. Charlestown, par
Millington,.....	do	Do. Leesburg,.... par
DISTRICT.		Wheeling Banks,.... 2 1/2
Washington,.....		Ohio Banks, generally 3
Georgetown,.....	Banks, 1 p.c.	New Jersey Banks gen. 3
Alexandria,.....		New York City,..... par
PENNSYLVANIA.		New York State,.... do a 1/2
Philadelphia,.....	par	Massachusetts,..... 1 1/2 a 2
Chambersburg,.....	1/2	Connecticut,..... 1 1/2 a 2
Gettysburg,.....	do	New Hampshire,.... 1 1/2 a 2
Pittsburg,.....	2 1/2	Maine,..... 1 1/2 a 2
York,.....	1/2	Rhode Island,.... 1 1/2 a 2
Other Pennsylvania Bks. 2		North Carolina,.... 3 a 2 1/2
Delaware [under \$5].... 4		South Carolina,.... 4 a 5
Do. [over 5]..... 1 1/2		Georgia,..... 5 a 5 1/2
Michigan Banks,..... 10		New Orleans,..... 7 a 8
Canadian do..... 10		

SPLENDID BLOODED STOCK FOR SALE.

The proprietor of Covington farm will dispose of the following fine bulls on reasonable terms, v. z.
 One bull two and a half years old
 One do. six months old.

of the improved Durham short horn breed; the dam of the first was got by the celebrated bull Bolivar; for size, form and beauty they are not surpassed by any animal in the state.

Three Devon Bulls, one of which is seven years old next spring, and the largest Devon in the State. The Devons are from the stock of the late Wm. Patterson, and of undoubted purity.

Two half Devon bulls.
 Two bulls half improved Durham short horn, and half Devon.
 One splendid bull, a cross of the Bakewell, Alderney and Devon.

One bull, half Alderney and half Holstein.
 These fine animals may be seen at Covington farm, near Petersville, Frederick county, Md. on application to James L. Hawkins, Baltimore, or to
FREDERICK EBERT, Manager.

SPRING CLOVER SEED,

Just received and for sale, by

R. SINCLAIR, Jr. & CO.

oct. 16

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FOR SALE,

A valuable FARM of prime soil, on the Western Run in Baltimore county, about two miles north west of the 14th mile stone of the Baltimore and York turnpike road, and at the same distance from the depot of the Baltimore and Susquehanna rail road, at Cockey's tavern, in a rich, highly cultivated and healthy tract of country.

This farm contains from 260 to 270 acres, having a full proportion in wood, much of which is building timber, peculiarly valuable in that neighborhood; is in the best state of cultivation; a considerable part in productive timothy meadow, and the residue of the arable land, not in grain, is well set in clover, the whole under good fencing, laid off into convenient fields, each of which is well watered. The farm has a large quarry of excellent building stone. There are on the premises an apple orchard of select fruit trees, which sell in fair to bear abundantly; a valuable mill seat on the Western Run, with a race already dug. There is no location in the country more favorable for a grist mill, having the advantage of a rich and thickly settled neighborhood, and a good public road leading thence to the turnpike road. Buildings substantial and convenient, being a STONE DWELLING, and kitchen of two stories; a large stone Swiss barn, with cedar roof and extensive stabling below; large hay house and stable for cattle; stone milk house near the dwelling, with a spring of fine never failing water, with other out-houses. On the country road near the mill-seat a good house and shop for a mechanic, under rent to a good tenant. It is well known the lands on the Western Run are in every respect equal, if not superior to any in the county. Adjoining or near are the lands of Col. N. Bosley, Daniel Bosley, Toos. Matthews and others. The water power, with about 20 acres of land, is so situated that they may be detached and sold separately, without injury to the rest of the farm for agricultural purposes. Terms of sale will be liberal. Apply to

NATHANIEL CHILDS,
 on the premises, or to
WILLIAM J. WARD,

oc 23 tf

Fayette, near Calvert st. Baltimore.

TO THE PUBLIC.

Try the New Agricultural Establishment in

Grant-street, next door to Dinsmore and Kyle.

Every article warranted to be first rate. The subscribers, grateful for past favors, take this early opportunity of returning their thanks to their customers and the public in general, and beg leave to inform them that they are now provided with a very extensive stock of newly manufactured AGRICULTURAL IMPLEMENTS, suitable to meet the call of Farmers, Gardeners, Merchants, Captains of vessels, and others, viz: 1000 Ploughs, assorted sizes, from \$4 to \$15 each, comprising of the old common Bar Shear, Winand's Self Sharpener; Woods & Freeborn's patent, all sizes, "Davis," "Sinclair & Moore's" improved Hill Side Ploughs, highly esteemed for turning the furrow down hill, with wrought or cast shears; Wheat Fans, of various sizes and patterns, from \$15 to \$50 each, warranted to separate the garlic from the wheat; Corn Shollers, from \$12 to \$20; Cutting Boxes, from \$7 to \$50 each; Corn and Tobacco Cultivators, large and small; Expanding do., Wheat Cradles warranted to have fingers of the natural growth, and Grass Scythes, &c. &c.; Castings, of all descriptions and patterns, by the lb. or ton, to suit customers, allowing a liberal discount to merchants buying to sell again—all of which will be furnished on the most pleasing terms and every article warranted to be of the best quality, in proportion to the cost price. All orders by mail or otherwise shall be duly attended to with the greatest despatch.

We would particularly call the attention of Country Merchants and others, wishing to purchase agricultural implements to sell again, to the fact, that we will furnish them with articles on better terms than they can be supplied at any other establishment in the city. Our assortment is complete and as varied as that of the most extensive concern in Baltimore.

We have also connected in its operations with the above branch of business a complete assortment of FIELD AND GARDEN SEEDS, kept by Thomas Denny—Also Garden and Farm Tools, of various sorts and of the choicest collection, which will enable our customers to have filled entire all orders in the Agricultural and Seed Departments. mh 26 JOHN T. DURDING & Co.

THE FARMER & GARDENER.

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, E. P. ROBERTS AND SAMUEL SANDS—EDITED BY E. P. ROBERTS.

No. 30.

BALTIMORE, MD. NOV. 20, 1838.

Vol. V.

✂ This publication is the *successor* of the late
AMERICAN FARMER
and is published at the office, at the N. W. corner of
Baltimore and North streets, over the Patriot office, at two
DOLLARS AND FIFTY CENTS per annum, if paid within one
month from the time of subscribing, or \$3 if after that
time. All letters to be postpaid.

BALTIMORE: TUESDAY, NOV. 20, 1838.

ROBERTS' SILK MANUAL.

In consequence of the former editions of this work having been disposed of, and to satisfy the daily demand for it, the undersigned will in a few weeks issue a *third edition*, greatly improved. As the subject upon which it treats is one of deep moment to the public, he would be grateful to those of his editorial brethren with whom he exchanges, either to publish this card, or notice its contents.

EDWD. P. ROBERTS,

Editor Farmer & Gardener, Baltimore, Md.

PERSONAL TO THE EDITOR.

At considerable risk last season, we procured, to a small extent, a supply of Spring Wheat to dispose of to such farmers as might be anxious to test its worth, and who might not have the opportunity of procuring it from the Eastward, where the seed was raised. In order that those tests might be made at as small an expense as possible to the experimenters, we merely charged such an advance upon the first cost, as would cover charges, &c.; and while others were selling at \$5 a bushel, we sold ours at \$3.50. After this disinterested conduct on our part, we did not expect to be dealt with in bad faith; but to our great inconvenience, we find, that, out of 112 barrels sold, 18 are still unpaid for. We, therefore, request those who are indebted on this account, to forward us the money without further delay. The wheat was sold for cash—it has, since it was so sold, been sown, grown unto ripeness, been harvested, and three months have elapsed since its product has been ready for market, and yet our cash for better than one-sixth of the whole amount has not come to hand. There is an injustice about this that we do not like, and hope that we shall not again have to ask for our dues. Should the bills sent with the grain be lost or mislaid, those indebted to us, will know what sum to remit us when we tell them, that the price of each barrel is \$12.16.

We should be pleased to see those who sowed Spring Wheat the past season, communicating the result of their respective attempts to introduce

its culture, as all experiments, contemplating a decided change in husbandry, ought to be not only fully tested and fully reported upon, but be approved, before the public would be justified in conceding to it entire confidence. There was a peculiarity attending the last season that make us anxious to learn how this grain succeeded. We allude to the long continued drought, and intense heat of summer. If it has prospered south of the Delaware under these trying and highly disadvantageous circumstances, it may with truth be affirmed, that it is worthy of being received into our course of crops; but if it bore their effects with less firmness than winter wheat—if its shrinkage and shrivelling were considerably more than that grain, as the same untoward circumstances of season may again occur, it will be best to cling to fall sowing, and trust to judicious preparation of the grain and soil for the rest.

If in putting in your fall grain you neglected to run water furrows, and there should be danger that the rains, or thawness of winter, may cause water to lie upon it, let us advise you to seize upon the first opportunity before the ground freezes, when it is dry enough, to run furrows through your fields, so as to catch and convey away, into some common receptacle, the superfluous water, which might otherwise have remained stationary on the grain, to its great injury and your consequent loss. If it be asked how those furrows are to be made, we reply—so as to perform the offices for which they are intended: about 18 feet is a good distance to have them apart, and as to the depth, that must depend upon the fall: wherever the declivity is so abrupt as to occasion washing or galling, let corn-stalks, weeds, brush, or stones, be placed in those parts of the furrows where danger is to be apprehended, in such manner as not to impede the passage of the water, but to save the ground from washing.

THE SILK CULTURE—OPINION OF MR. GALLATIN.

Mr. Gallatin, a sagacious statesman and a close observer of men and things, said more than twenty years ago, that this country must one day become a silk growing country, and would have been so then, but that the Americans entertained

a false notion that there was a *mystery*, a grand secret in raising silk, whereas it is one of the most simple operations, and as sure a crop as flax or cotton.

Maple Sugar.—In Acworth, an inconsiderable town in New Hampshire, the maple sugar manufactured during the present year amounts in quantity to forty thousand pounds, and in value to five or six thousand dollars. The inhabitants can hardly need to import much sugar from other places.

THE BANANA.

The banana and the bread-fruit are examples of extraordinary vegetable fruitfulness, with very little assistance from the care of man. The banana is not known in an uncultivated state; and those who principally depend upon the plant for subsistence propagate it by suckers. But here the labor of cultivation almost ends; and M. Humboldt has calculated that thirty-three pounds of wheat and ninety-nine pounds of potatoes require the same space as that in which four thousand pounds of bananas will grow. But the industry of the European surrounds him with a much greater amount of blessings than the almost spontaneous bounty of Nature to the Indian who lives upon his patch of bananas. The same reasoning applies to the bread-fruit; for when the produce of two or three of those trees will suffice for a man's yearly supply, he is not likely to call forth the faculties of his mind, which wait upon a constant course of assiduous labor. Those bodies of mankind are in the happiest state who are placed by climate between the extremes of natural fruitfulness and sterility. Where nature offers spontaneous food to large tribes, as in a few situations in tropical countries, their condition is nearly as wretched, taken under all its circumstances, as that of those poor inhabitants of polar regions, of whom almost every thing appears to be denied by the "All-giver," but who really obtain comforts by their persevering labor, which the idle native of the finest soil almost always wants.

Grain Measure.—Persons who cannot conveniently procure a half bushel—a peck measure, &c of the ordinary construction, may make light square boxes, that will answer their present purpose very well.

1st. A box that will measure in the inside, 10½ inches square, and the same in depth will hold a half bushel, and only a table spoonful over.

2d. A box that will measure within 8 inches square and 8 4-10 inches in depth will hold a peck.

3d. A box measuring within 6½ inches square, and 6 3-8 inches in depth will hold four quarts—grain measure.

To the Editors of the National Intelligencer.

SILK AND SUGAR.

GENTLEMEN—I have had the liberty to make the enclosed copy of a letter from a gentleman now in Paris, to the Hon. H. L. Ellsworth, of this city, which I submit to you for publication. It is gratifying to find the inventive genius of Professor Morse so signally acknowledged in France; and the suggestions of the writer at the close of the letter, in relation to the production of *Silk and Sugar*, are of such vast importance as will, I hope, be felt by those who possess the power to direct the attention and energies of the agriculturists of our country to these new sources of national wealth.

With great respect, &c.

—
PARIS, Sept. 12, 1838.

"My Dear Sir—I am sure you will be glad to learn, that our American friend, Professor Morse, of the New York City University, is producing a very great sensation among the learned men of this kingdom, by his ingenious and wonderful Magnetic Telegraph. He submitted it to the examination of the Academy of Sciences of the Royal Institute of France, at their sitting on Monday last, and the deepest interest was excited among the members of that learned body on the subject. Its novelty, beauty, simplicity and power, were highly commended.

"M. Arago, the learned and eminent Principal in the Astronomical Observatory of the French Government, has manifested a very lively gratification in regard to it. He addressed the Academy in regard to our countryman's invention, in terms that could not but have been most pleasing, as they were certainly most creditable to Mr. Morse. It is understood, that a report of the exhibition will be submitted by M. Arago in the forthcoming number of the published proceedings of the Institute. The favorable consideration and opinion of a man and philosopher so eminent in the scientific world as M. Arago, and so intimately associated with the learned institutions of the French Government, will be in itself a rich reward for American ingenuity to attain in the field of science. Other projects for the establishment of a magnetic telegraph have been broached here, especially from Prof. Wheatstone of London, and Prof. Steinheil of Munich. It is said, however, to be very manifest that our Yankee Professor is ahead of them all in all the essential requisites of such an invention, and that he is in the way to bear off the palm. In simplicity of design, cheapness of construction, and efficiency, Professor Morse's Telegraph transcends all yet made known. In each of these qualities, it is admitted by those who have inspected it closely, there seems to be little else to desire. It is certain, moreover, that in priority of discovery he antedates all others.

"In being abroad, among strangers and foreigners, one's nationality of feeling may be somewhat more excitable than at home. Be this as it may, one cannot but feel gratified, as an American, that our countryman, like Fulton in the practical science of steam, is thus in advance of the learned men of the old world in this triumphant adaptation to every day uses of the elder sister of steam power, *electricity*. The result of his ingenuity will in a few years impart to the intercourse of

men at points distant from each other an aspect no less wonderful and influential than that which the use of steam power has already imparted to it. In this respect, another revolution is at hand, even more wonderful than its predecessor. I do not doubt that within the next ten years you will see this electric power adopted between all commercial points of magnitude on both sides of the Atlantic for purposes of correspondence, and men enabled to send their orders or news of events from one point to another with the speed of lightning itself, superseding thereby all the old modes of "express mails" and of post boy correspondence in all matters of moment to Governments and trade. The extremities of nations will be literally *wired* together, and brought, for all purposes of written correspondence, within the compactness of a common centre. In the U. S., for instance, you may expect to find, at no very distant day, the Executive messages, and the daily votes of each House of Congress, made known at Philadelphia, New York, Boston, and Portland—at New Orleans, Cincinnati, &c., as soon as they can be known at Baltimore, or even at the opposite extremity of Pennsylvania avenue! The merchant at Boston or New York will yet be able to correspond with his ship master at New Orleans on the subject of freights, prices of cotton, sugar, &c., in every hour of the day, and give orders and receive return answers between the same distant points in the one and same hour, and by night as well as by day, amid storms as readily as amid sunshine! To predict this much seems now like a fairy tale; and it is, indeed, overwhelming to contemplate the realities which science and practical skill are pouring in upon our age. It is no longer a proverb, but the saying has risen to the solemnity of a mathematical truth, that '*truth is stranger than fiction*.' Abstract imagination is no longer a match for reality in the race that science has instituted on both sides of the Atlantic.

"I have been highly gratified to find that the French Government is pushing with all its might every species of research and experiment upon the two subjects which are destined to be of leading interest and absorbing importance to our country—I mean the growth and manufacture of the sugar beet, and the treatment of the silk worm. It is to be hoped that the American Government will no longer slumber, for slumbering it still is, in reference to these interests, but that, without any stinted calculations of the cost, it will forthwith adopt all necessary measures for developing within its own limits, and making known to our own citizens, the incalculably extended resources which are within the reach of Americans in reference to the growth and manufacture of the sugar beet, and the rearing of silk worms. I have taken all pains to supply myself with every treatise of value yet published here upon these subjects, with a view of converting them to such use, in the diffusion among my friends of the details they furnish, as my limited leisure and opportunities will permit. But the spirit and policy of the French Government on these and like matters of national interest are worthy of all commendation. It is in this spirit and this policy I would like to see the Federal Government of the American States imitate the French and other European

Governments. Expenditures thus incurred, will, like the bread of charity cast upon the waters, return in due season with manifold blessings to the donor."

From the National Intelligencer.

WASHINGTON CITY SILK COMPANY.

The following abstract of the report of the committee appointed to draught a constitution, &c. for the Silk Company of this city, made some eight or ten days ago, is taken from a New York paper, and its statements will serve to convey some idea of the advantages likely to result from the establishment of such a company here. It deserves every encouragement, and the citizens will be blind to their interests if they do not give it all the aid in their power. It will not only be productive of emolument to the stockholders, but give employment to many who are now idle, form the nucleus of other manufacturing establishments in our city, and be the means of retaining within our own country an immense amount of money annually shipped out of it to foreign nations, on whom we have depended for the supply of an article that has almost become a necessary of life:

"The report embraced the information contained in a report made to Congress [by Mr. Randolph of New-Jersey,] from a committee of the House of Representatives in April last, from which I send you some extracts that may be interesting and valuable to your readers. It commences by showing the sum annually paid by the people of the United States to foreign countries for this article alone, by giving the value of the imports of silk for six years respectively, viz. In 1832, it was \$9,147,812; 1833, \$9,309,547; 1834, \$10,998,964; 1835, \$16,597,983; 1836, \$22,980,212; and in 1837, \$14,352,823.

"Many important advantages, the Congressional Committee think, would arise from the extensive cultivation of the mulberry and sugar beet in this country. It would introduce to the farmer new and valuable and profitable productions—would improve our lands—increase the amount of productive industry, and condense, improve, and enrich our population. To a large class of individuals who are unable to support themselves for the want of suitable employment, such as indigent females and children, the aged and infirm, to whom may be added the long list of paupers in our poor-houses, and prisoners in penitentiaries, the cultivation of silk presents a most suitable and advantageous employment.

"The committee proceed to remark, that considerable efforts were made at an early period of our history to introduce into this country the culture of silk. Connecticut, New Jersey, Pennsylvania, Virginia, Georgia, and perhaps other States, had made considerable progress prior to the revolution; but that trying event effectually prostrated it for many years. Afterwards it was found that other products obtained so ready a market, and so high a price in Europe, that few felt inclined to abandon them for the purpose of testing any untried experiment in agriculture. The white Italian mulberry, moreover, till within a few years was the only variety cultivated as good for the silk-worm, and this was unfit for use for several years, so that the cultivator was compelled to lose the use of his capital and labor for some years, be-

fore he had any prospect of remuneration. To this may be added the extreme difficulty which, till recently, attended the process of reeling, and the want of a market for cocoons, or even raw silk.

"At present these difficulties no longer exist—The farmers, so far from having a great market abroad for their grain and other produce, have really a competitor at home; the cultivation of the white mulberry has been substituted by that of the *morus multicaulis*, and other varieties, which may be stripped of their foliage the same year that they are planted, and the old tedious mode of reeling has given way to the new patent reel, by which a child may learn, in a few hours, to reel with great ease and expedition. Many silk weavers have also established themselves in this country, and opened a good and permanent market for all the cocoons and raw silk that can be raised, being now under the necessity of importing large quantities to keep their factories in operation. Mr. Miner, of Pennsylvania, was the first to bring the subject before the House of Representatives in 1825. On the 2d of May, 1826, Mr. Van Rensselaer made an interesting report on the subject, concluding with a resolution authorizing the Secretary of the Treasury to have a manual prepared on the growth and manufacture of silk; and in February, 1828, the Secretary transmitted the manual called for, containing upwards of 200 pages. About the same time Mr. James Mease transmitted to the Speaker a treatise of about one hundred pages, on the rearing of silkworms, by Count Von Hazz, of Munich, which was ordered to be printed and distributed.

"In 1830, Mr. Spencer made a report, submitting two letters from Mr. Duponceau, of Philadelphia, and Essays on American Silk, by Duponceau and D'Homergue, of which six thousand copies were ordered to be printed and distributed—This report proposed to grant to D'Homergue \$10,000 for the establishment of a Normal School of filature at Philadelphia, and the gratuitous instruction of sixty young men for two years in the various branches of reeling, manufacturing, and dyeing of silk—during which he was to travel through the different states, and give gratuitous instruction to farmers and others desirous to embark in the silk business. The bill was not acted on, but in the mean time Mr. Duponceau had established, at his own expense in Philadelphia, a filature of ten reels and twenty women, under the direction of Mr. D'Homergue. In January, 1832, Mr. Root reported the same bill to the house, but it finally failed. In 1835 Mr. Bockee made an unfavorable report on the subject on constitutional grounds, and in 1837 Mr. J. Q. Adams made a report of great interest to the house.

"The committee believe (and there is no doubt of the fact,) that no country in the world is better adapted to the production of silk than most parts of the United States. The mulberry will grow on high, stony, sandy and comparatively barren land; and though the poverty of the soil may decrease the quantity of the foliage, it will improve the quality and add firmness and beauty to the silk. In the southern parts of the union, from eight to ten crops may be raised annually. The worn-out tobacco lands of Virginia and North Carolina, and the impoverished soils of other old states, may be advantageously appropriated to the

culture of the mulberry, and will yield a much larger annual profit than is now usually derived from the best soils. The *morus multicaulis* has, for some years, been considered the most valuable variety of mulberry, though the *Brussa* recently introduced into this country from Turkey is highly spoken of as of a superior quality. The large white six-inch worm seems to be generally admitted to be preferable for the production of silk.

"Mr. J. C. Parsons, in his letter to the committee of the House of Representatives, says, that of the different varieties of the mulberry, the *Multicaulis*, Canton, Chinese, Florence and White, the leaf of the first is rather the largest, but he prefers the *Canton*, of which the leaf, though not equal in size to the *Multicaulis*, is much thicker, and nearer set. It is of a more rapid growth, and a very hardy tree, and will stand our climate without any difficulty. The *Florence* is next to it, and from both the leaves may be stripped after they are one year old. He considers a *western* exposure by far the best for these trees, contrary to the general belief, which is, that a southern exposure is needed. Mr. Hammond, in his letter, declares that he believes the *Multicaulis* to be preferable to any other kind, as it is easily propagated, and very tenacious of life; it yields a greater quantity of foliage; it is preferred by the worm, and those fed on it produce a very superior quality of silk. The quantity of foliage measurably depends on the richness and quality of the soil, and the proper culture of the tree. Mr. D. Stebbins asserts that the *Multicaulis* was found in a garden in *Manilla*, cultivated as an ornamented tree, and is now called *Manilla Multicaulis*. The *Canton Multicaulis* is the true kind used by the Chinese, and is deserving of the first consideration, and to be preferred to all others.

"In relation to the value, expense, and profit per acre of the culture of silk, Mr. E. P. Roberts says that 1000 silkworms consume, during the entire feeding season, 50 lbs. of leaves—3000 cocoons will make one pound of silk—an acre of *Multicaulis* will supply one million of worms with foliage, which will make 333½ lbs. of silk—various expenses of one acre of land, valued at \$10 an acre, including interest, manure, ploughing, harrowing, wages, &c. per year, \$203 86—produce of one acre converted into raw silk, say 333½ lbs. at \$4 per lb. \$1,333 33½—nett profits \$1,129 48.

"This is the substance of the report made by the committee to the meeting. The constitution was submitted and adopted, which provides that the officers of the company shall consist of a President and Vice President, Treasurer, Secretary, and seven Directors; that the capital shall be \$10,000, with power to increase it if necessary, and the society is to commence its operations when one-fourth of the stock shall be subscribed.—Nearly that amount was subscribed, I learn, by those who attended the last meeting, and there is, therefore, every reason to believe that the company will not only be organized, but be able in a short time to make a handsome dividend."

From the Zanesville Gazette.

NEW ENGLAND CATTLE SHOWS.

In some of the New England states, agricultural exhibitions, and cattle shows, are annually

helden in nearly every county; and even many of the towns, or townships, have their separate shows.

The N. E. Farmer, in speaking of the cattle show at Worcester, Mass., says, "the exhibition of live stock embraced 377 entries."

"Among the working cattle, we noticed several pairs of beautiful oxen and steers, which appeared to be the pride of their owners, and well may they be proud of such fine creatures, for they seemed to partake of the intelligence of their owners, and were perfectly obedient to their voice, &c."

"One hundred and fifty dollars per yoke was asked for some of this description, and others, we suppose, could hardly be bought for money. One pair of twin steers belonging to Mr. Lovett Peters, of Westborough, attracted much attention, being a perfect match, large, and of good shape; their weight as marked on the yoke, was 3833 lbs., one of them about 25 lbs. heavier than the other—their age about 3½ years."

The Maine Farmer, in speaking of the cattle show of Kennebec county Agricultural Society, says, "there were present about 150 yoke of working oxen, in fine order, and beautiful animals. We are told they would bring from 150 to \$200 per yoke, if they were put into the market for sale. Some persons who were present for the purpose of purchasing, offered \$180 per yoke for several yoke of them."

The South may boast of its race horses, and the West of its numerous swine, but perhaps no country can boast of such beautiful and well disciplined teams of working oxen, as New-England. H.

From the Genesee Farmer.

LATE PLOUGHING.

Where lands are tolerably clear and in good order, and especially where the composition or situation is such that early spring ploughing is inconvenient or impracticable, fall ploughing has been adopted by many farmers with the best effects. The advantages are, that on clay grounds the action of the frost during the winter pulverizes the ground more effectually than repeated ploughings in the spring season could do; the crops can be got in better season, and this with spring crops is frequently of great moment—and the teams of the farmer are in a better condition, usually, for service in the fall than in the spring, and consequently their work is done when they are the best able to perform it. We have had our best crops of barley and spring wheat on lands ploughed in the fall of the year; particularly where the crops were put in on turf land. In doing all ploughing too much care cannot be taken to have it done well; but as it is customary not to again plough such lands in the spring, the necessity of performing it well in the fall is doubly imperative. We have also found great benefit from fall ploughing where our land was infested with the wire worm. Last fall as late as practicable, we ploughed part of a field that had been planted with corn, but which had been almost wholly destroyed by this destructive worm, and last spring sowed the whole field with barley. The part so ploughed was decidedly better than the other, suffered less from the wire worm, and was in better tilth than the part that was ploughed in the spring.

PRESERVATION OF THE POTATO.

One can form something of an estimate how extensively the potato enters into use as an article of food among the American people, from the complaints we hear from all parts of the country, or at least with very few exceptions, of the partial failure of that crop the present season. We frequently hear people when instituting a comparison between that root and bread, declare they would sooner part with their wheat bread, than with their potato; and these are not the poorer classes, but respectable wealthy people. Now, though we do not carry our affection to this esculent as far as this, yet we are "free to acknowledge" that a good potato is a good thing, and an inferior one the worst of bad things. An unripe or defective potato, is one of the most indigestible and unwholesome kinds of aliments that can be taken into the stomach, if indeed there is any aliment about it at all; and from the specimens we have seen at numerous tables this year, we have no doubt that many of the cases of illness that have been charged upon hot weather, bad water, *malaria*, and a variety of other things, are justly due to the swallowing potatoes as hard and as heavy, as well as about the size of ounce balls.

The potato, in its original uncultivated state, is decidedly poisonous; and whenever it is used in an imperfect or unripe state, the result is not widely different now.—Owing most likely to the hot dry weather, potatoes, this year, are generally of an inferior quality, and hence more pains and care should be taken in selecting those intended for food, and greater attention paid to preserving them, than in years like the last, when among thousands of bushels there was scarcely a defective one. Ireland, on the other side of the Atlantic, and Nova Scotia on this side, are the most celebrated for the excellence of their potatoes, and both have a temperature comparatively low, and an atmosphere moist and humid. If such a climate and temperature is required for the perfection of this root, will not the hot weather we have had the present year, account most satisfactorily for its little value, and also show why its growth is impossible in our more southern states, or still nearer the equinox.

Potatoes almost instinctively shun the light and air.—These things so indispensable to the perfection of many other things, are most injurious to the potato, and the grand secret of its preservation lies in the most perfect exclusion of these silent but active agents. To perceive the difference between roots exposed, and those secluded, we have only to take one which has grown partially above ground, and one that has ripened in its proper place. The one will be green on the exterior, hard, heavy and bitter in the interior, while the other will be of the natural color, farinaceous, and fine flavored. Farmers should take lessons from these facts, and conform their practice to the teachings of nature. In England and Scotland, where most serious complaints have arisen from the failures of the planted tubers, it is acknowledged by all, that roots which are allowed to remain in the ground during the winter never fail of vegetating, and that those secured by pitting are more likely to succeed than those put into cellars, and thus partially exposed to light & air.

The most common method of preserving potatoes is to put them into bins in the cellar, where

they are left without any covering or other preparation, and used as wanted. It is also customary to get in as little dirt with them as possible, and one standard of good farming has been the clean state of a farmer's potatoes when deposited in his cellar. For the reasons given above, and from our own experience, we think both these modes of securing potatoes, or preparing them, erroneous. If put into bins, they should be covered as closely as possible from light and air; and if there is dirt enough thrown into the bin to completely fill all the interstices between them, so much the better for the roots. It has been recommended by some potato growers, and the practice is founded in reason, to line the sides of the bins with turf, the lower sides placed inwards, and when the bin was filled, to cover it closely in the same way, and with the same material.

Owing to the severity of our winters, potatoes cannot be allowed to remain where they grow, else their mealiness and freshness would be much increased by allowing those that are to be used the coming season to remain where they are till the spring opens. Since this cannot be, the method doubtless is pitting, or as most of our farmers term it, burying in holes in the field. In burying in this way care should be taken not to put too many in a pit, or in other words, not make the heaps too large. Twenty or twenty-five bushels is quite enough; and some prefer even a smaller number. The cone should be regular so as to be covered equally. The covering of straw and earth first put on should not be too thick, as otherwise the roots will heat, and be injured; but at the latest period allowable, the thickness of the covering should be increased so as effectually to prevent freezing. In covering potatoes in the fall, it should be remembered that the great object of the first covering, is simply to exclude air and light, and preserve them from rain or unfavorable weather, and the last covering is the one to be relied on as a defiance against the frost. If the roots are dug and pitted immediately without necessary exposure, and if the ground and the process of covering is properly selected and performed, the potatoes will come out in the spring in excellent order, rather improved than deteriorated by their winter's keeping.

Farmers who are in the habit of making their pork from potatoes, or feeding them extensively to their stock, will undoubtedly see the propriety from the present high prices, of sorting their roots more carefully than they have hitherto done, in order to sell, or preserve, as many as possible. The apprehended scarcity of this root will also prompt to this course; and should induce all to adopt the best and most effectual measures to preserve through the winter uninjured, or, if possible, improved, this root on which so many rely for sustenance.—*Gnecsee Farmer*.

From the Zanesville Gazette.

INDIAN CORN.

Messrs. Parke & Bennett—I have raised, this year, thirteen different kinds of Indian corn. The cause of my planting so many varieties, is partly owing to accident and partly to design. I had several samples of new kinds, which I wished to try, and I planted some other kinds in order to obtain a regular succession of ears for boiling, or as the Buckeyes say, "roasting ears," though I have

not seen an ear of corn roasted since I have been in Ohio.

On one of the latter days of April last, I planted four kinds, all of which would, in this part of the country, be considered *early*, as they would ripen much sooner than the common kinds here cultivated. Yet there is considerable difference in their relative earliness. They are what is called northern varieties, being distinguished from the southern kinds by the roundness and hardness or flintiness of the kernel, compared with the flat and soft kernel of the latter varieties. I herewith send you samples of each of the four kinds here spoken of, and also two other kinds. The numbers on the labels, correspond with the following enumeration.

- No. 1. Early White Tuscarora,
- " 2. Early Canada Twelve Row,
- " 3. Early Golden Sioux, or Dutton,
- " 4. Hathaway,
- " 5. Baden,
- " 6. Texan.

No. 1 was received of Mr. J. Townsend, of Falls township in this county. I do not know how long the stock from which this seed was taken, has been raised in this vicinity. Its earliness much depends on this, as I shall presently show. No. 2 was procured from Mr. H. G. Cole, of Hallowell, Maine, in 1837. No. 3 sent by Judge Harper, representative in Congress from this district, from the city of Washington, last spring. I know not where it grew—probably in Maryland or Pennsylvania. No. 4 was obtained of R. Howard, Esq. Easton, Mass. 1837. No. 5 was obtained by a friend from the vicinity of Baltimore, Md. last spring.

I am so well satisfied of the importance of obtaining early vegetables from the north, that I have ordered my early seed potatoes for next season, from near the 45th deg. of north latitude, in the state of Maine.

The extreme wetness and coldness of April and May, occasioned the failure of much of the first planted corn to vegetate. Not more than one third of it ever came up at all, and of what did finally come, the growth was for some time very slow, and the plants feeble. This so much affected the yield of the crop, that no fair calculations could be made as to the general productiveness of these kinds in this part of the country. Their maturity was also considerably retarded by the above mentioned causes; so that this experiment ought not to be taken as a *fair* criterion of either their earliness or productiveness. *Something*, however, of their relative earliness, may be inferred from the following: on the 19th of July, I found that much of No. 2, and a little of No. 1, was in a state fit for boiling. Eight days afterwards, No. 4 was in the same state, and 13 days afterwards, that is, on the 1st of August, No. 3 or the Dutton, was fit to boil. Considerable of No. 2 was ripe enough to harvest on the 1st of August. This variety passes much sooner from a state in which it is suitable to boil, to a state of ripeness, than any other I ever saw. It is valuable in northern latitudes, on account of its quick growth. In some parts of Maine, it has been harvested, perfectly ripe, in ten weeks from the time it was planted. Instances are not rare, of its yielding from 40 to 50 bushels to the acre.

The Dutton corn came up better than any of the

other kinds. I saved all but one hill for seed, and carefully measured the ground and calculated the product. The yield was at the rate of 52 bushels to the acre. It has sometimes yielded 100 bushels to the acre. This corn was formerly obtained of the Sioux tribe of Indians, on the Upper Mississippi, (at least such is the tradition,) and was introduced into New-York and Massachusetts, where it has been cultivated and recommended by Judge Buel, a Mr. Dutton, E. Phinney, Esq. of Lexington, Mass. and is sometimes known in the latter state, and in Maine, as the *Phinney corn*—It has been introduced and considerably raised in the neighborhoods of Baltimore and Philadelphia for a year or two past, and has sometimes been found to yield more, under the same circumstances, than the common kinds of flat corn raised in that vicinity, as will appear from several communications published in the Baltimore and Philadelphia papers.

No. 4 is considered a very valuable kind in the south-easterly part of Massachusetts. It will produce a greater number of ears in proportion to the number of stalks, or the number of kernels planted, than any kind I ever knew. From one kernel there are frequently three stalks, bearing from one to three good ears each. The Plymouth county, Mass. Agricultural society, has paid premiums for one hundred bushels and upwards of this kind of corn raised on an acre.

Whether any of these early northern varieties could be profitably adopted by the farmers here, for a general crop, I cannot positively say. Under some circumstances they would undoubtedly be advantageous. If I had planted for my entire crop, either No. 3 (Dutton), or No. 4 (Hathaway) I have no doubt I should have got a better yield than with the common varieties which I planted. For this reason—they would have grown so much quicker, that the crop would have been much less injured by the drought. But there are some objections to these early kinds; to how much weight they are entitled, experiments must show. Owing to the smallness of the stalk, the crop would require more attention and labor to prevent its being overrun with the great growth of weeds, to which all the best corn lands in this part of the country is subject. The grain is too hard to feed to any kind of stock without grinding. So far as my acquaintance extends, very little corn is ground for the purpose of feeding animals in this part of the country, and the softness and lightness of the corn commonly raised here and further south, renders it much better adapted to feeding in a crude state, than the heavier and harder corn of the north. In the northern states, where the early and flinty varieties alluded to, are raised, very little is used without being ground. That fed to animals is usually ground *with the cob*. Experiments, judiciously and carefully conducted, have shown that animals derive considerably more benefit from a given quantity of corn when ground into meal, especially if the meal is cooked, than when fed with it whole. But whether with the softer kinds of corn raised here, which are more easily and thoroughly masticated and digested, and considering also, the general system of feeding (in all its relations,) practised here, it would be economical to adopt the northern custom of grinding and cooking, can only be determined by experiment. The northern varieties of corn are

several pounds in the bushel heavier than the southern or flat corn, and consequently may be considered as containing proportionately more nutriment, and are generally thought more valuable for culinary purposes.

If any of these varieties were cultivated here for a length of time, they would probably somewhat change in their characters, but whether they would become more productive, is questionable. In the year 1829, my brother brought out here from Massachusetts some of the kind which in the list is numbered 4. Last spring, I planted some of it which he had saved for seed last year. It has always been kept without any intermixture with other varieties, but what care has been used in selecting seed, I cannot say. I planted it by the side of the same kind which I brought from Massachusetts last year; but no one would have imagined on seeing it when it had attained its full size, that it was the same kind, or ever had been. That grown from seed the stock of which had been raised here for eight years, grew nearly twice the height of that produced from seed obtained in Massachusetts last year. It seemed to adhere to the habit of producing several ears to the stalk, but the ears were shorter and smaller. It had acquired by acclimation, a tendency to make more foliage and less grain, than that which was just brought from the north, and was besides a week or ten days later ripening. If people desire the earliest varieties of grain or vegetables, they should obtain seed from the highest latitudes that it is to be found; because the nature of the climate is there such that it induces a rapid growth and early maturity, in all annuals, and the plant will, in a degree, retain the characteristics there acquired even when carried to a different climate; but it will gradually lose its original peculiarities, (unless care is taken in selecting seed, &c. to prevent it,) and assume habits and properties similar to those belonging to plants of the same species which have been for a long time cultivated in the region to which it is introduced.

On the 26th of May, I planted 15 kernels of the Baden corn, (No. 5); only twelve of them came up, and one stalk of these produced nothing but smut, the remaining 11 produced 28 good sized ears. The greatest yield of any one stalk was the three ears herewith sent. It put out in some cases for six or seven ears on a stalk, but no more than three in any case filled. It showed nothing like the product of eight, ten or twelve ears to the stalk which some talk of. It was planted on as good ground as any in this vicinity. It, however, suffered considerably from drought, or otherwise it would probably have produced more. I should be glad to hear through your paper, how others in this neighborhood have succeeded with this kind of corn. Dr. Mathews of Putnam, I believe, raised it this season, and it would be gratifying to have from so close and accurate an observer as he is, a statement of its yield compared with other kinds. It has within a few years become much celebrated in some of the middle and southern states, and very high encomiums are bestowed on its productiveness. Experience does not enable me to speak with precision on this point, or on its adaptedness to the soil and climate of this vicinity; but one thing is certain, and that is, it requires a long season. It has scarcely had time enough to grow this year. I

gathered mine on the 12th inst. The stalks were, even then, quite green, but fearing a severe frost, (which, according to my fears, occurred,) I thought it best to secure it. It appears to me also, to require a very strong soil, and to need a good deal of room. The rule among those who have cultivated it, is said to be to have the hills $4\frac{1}{2}$ feet apart, and have two stalks in a hill.

The *Texan corn*, as it is here called, is peculiar in having each kernel enveloped in a husk. I perceive that some Illinois correspondent of the *Genesee Farmer*, very highly praises it under the name of the "*Stock corn*," and thinks its peculiarities render it very valuable for the purpose of feeding stock. But the kernel is so very hard, (as you will perceive from the specimen sent,) that I cannot think it so valuable even for this purpose as some other varieties. As to productiveness, I should not think it remarkable.

SANFORD HOWARD.

N. B. You will perhaps recollect showing me last March, some new potatoes, sent by one of your friends, which were said to have grown during the winter. You will probably also recollect that it was difficult to determine whether they were potatoes or artichokes. I planted two of the articles, and they came up and produced *bona fide* potatoes. The two I planted, produced three about the size of a Guinea fowl's egg, and one as large as a goose's egg. They appeared to be the kind called here *Mechanics*—The only advantage that I can perceive as likely to accrue from thus producing potatoes in the winter, (and that is doubtful,) is in seasons of scarcity like the present, to multiply seed for another year.

S. H.

From the Cabinet Library.

UTILITY OF LIME AS A MANURE.

The utility of lime as manure consists in loosening the tenacious nature of some soils; rendering them more friable and receptive of vegetable fibres: it especially facilitates the dissolution and putrefaction of animal and vegetable substances, which are thus more readily received and circulated in the growing plant; and it has the power of acquiring and long retaining moisture; thus rendering a soil cool and nutritive to the plants that vegetate in it. The power that lime has of absorbing moisture will be better understood, when we say, that one hundred weight will, in five or six days, when fresh, absorb five pounds of water, and that it will retain in the shape of powder, when slackened, or loosened, as is commonly said, nearly one-fourth of its weight.*

That lime rehardens after being made soft, as in mortar, is owing to the power which it has of acquiring carbonic acid—the fixed air of Dr. Black—from the atmosphere; when the stone is

* The weight of lime is very variable, differing in different places: but taking our lime at the average of eighty pounds to the bushel, some idea may be conceived of the cooling nature of this substance. Lime, to be used as manure, must be in a pulverized state; and by drawing on the land the quantity that we do, we convey to every acre so dressed equivalent to two hundred and fifty gallons of water, not to be evaporated, but retained in the soil as a refrigerant to the fibres of vegetation.

burned, it loses this principle, but re-absorbs it, though slowly, yet in time, and it thus becomes as hard as stone again: we unite it with sand to promote the crystallization and hardening. The utility of lime in various arts, agriculture, manufactures, and medicine, is very extensive, and in many cases indispensable; and the abundance of it spread through the world seems designed as a particular provision of Providence for the various ends of creation. Lime, and siliceous substance, compose a very large portion of the dense matter of our earth; the shells of marine animals contain it abundantly; our bones have eighty parts in one hundred of it; the egg-shells of birds above nine parts in ten—during incubation, it is received by the embryo of the bird, indurating the cartilages, and forming the bones. But the existence and origin of limestone are pre-eminent amongst the wonders of creation; nor should we have been able, rationally, to account for the great diffusion of this substance throughout the globe, however we might have conjectured the formation, without the Mosaic revelation. It may startle, perhaps, the belief of some, who have never considered the subject, to assert what is apparently a fact, that a considerable portion of those prodigious cliffs of chalk and calcareous stone, that in many places control the advance of the ocean, protrude in rocks through its waters, or incrust such large portions of the globe, are of animal origin—the exuviae of marine substances, or the labors of minute insects, which once inhabited the deep. In this conclusion now chemists and philosophers seem in great measure to coincide. Fourcroy observed, forty years ago, that “it could not be denied, that the strata of calcareous matter, which constitute, as it were, the bark or external covering of our globe, in a great part of its extent, are owing to the remains of the skeletons of sea animals, more or less broken down by the waters; that these beds have been deposited at the bottom of the sea; immense masses of chalk, deposited on its bottom, absorb or fix the waters, or convert into a solid substance, part of the liquid which fills its vast basins.”—*Supplement to Chemistry*, p. 263. Such are the conclusions of philosophical investigation; and the discoveries of all our circumnavigators fully corroborate these decisions as to formation. Revelation in part accounts for the removal of these stupendous masses; though, probably, unrecorded concussions since the great subversion of our planet have, in remote periods, effected many of the removals of these deposits. We find the basement of many of the South Sea Islands, some of which are twenty miles long, formed of this matter. Captain Flinders, in the gulf of Carpentaria, held his course by the sides of limestone reefs, five hundred miles in extent, with a depth irregular and uncertain; and still more recently Captain King, seven hundred miles, almost a continent, of rock, increasing, and visibly forming:—all drawn from the waters of the ocean by a minute creature, that wonderful agent in the hands of Providence, the coral insect. This brief account of the origin of calcareous rocks was, perhaps, necessary before mentioning an extraordinary fact, that, after the lapse of so vast a portion of time since the basement of the mighty deep was heaved on high, existing proofs of this event should remain in our obscure village.

The limestone rocks here are differently composed, but are principally of four kinds—a pale gray, hard and compact; a pale cream coloured, fine-grained and sonorous: these form the upper stratum of stone on our down, a recent deposit, or more probably a mass heaved up from its original station. The whole of this mass, running nearly half a mile long, is obviously of animal formation, a coral rock; a compounded body of minute cylindrical columns, the cells of the animals which constructed the material, the mouths of which are all manifest by a magnifier. The stop in the progress of the work is even visible; soft, stony matter having arisen from some of the tubes, and become indurated there in a convex form; in others the creatures have perished, but their forms or moulds remain, though obscure, yet sufficiently perfect to manifest the fact: these tubes, by exposure to the air for any length of time, have the internal or softer parts decomposed, and the stone becomes cellular. This stone burns to a fine white lime, and is very free from impurities, containing in a hundred parts—

Carbonate of lime	-	-	-	88
Magnesia	-	-	-	8
Silex	-	-	-	1
Alumine,† colored with iron	-	-	-	3
				100

Another quarry presents, likewise, unquestionable evidence of an animal origin, veins of it being composed of shattered parts of shells, and marine substances, greatly consumed and imperfect, embedded in a coarse, gray, sparry compound; an ocean deposit, not a fabrication, and consequently has more impurities in its substance than that of insect formation: it contains about

Carbonate of lime	-	-	-	73
Magnesia	-	-	-	11
Clay	-	-	-	14
Silex	-	-	-	2
				100

These two specimens so clearly prove that the original materials of their substance were derived from the deep, that no further arguments need be advanced to support this fact as to our limestone. The former is, perhaps, the mountain limestone of Werner; the latter a variety of dolomite. Our other quarries, as well as the lower strata of the above, present no such indications of animal formation, and they are probably sediment arising from a minute division of shelly bodies, now indurated by time and superincumbent pressure, and become a coarse-grained marble. Our limestone thus appearing not to be contaminated with any great portion of magnesian earth, it may be used for all agricultural purposes with advantage. Many detached blocks of limestone are found about us, having broken shelly remains, and the joints of the encrinite, greatly mutilated, embedded in them. Irregularly wandering near the lime-ridge is a vein of impure sandy soil, covering a coarse-grained siliceous stone; sand agglutinated, and colored by oxide of iron, resisting heat, and used

† I have called this alumine, stained with oxide of iron; but it seems more like vegetable or animal remains, adhering to the filter like a fine peaty deposit, and is lost in combustion.

in the construction of our lime-kilns: the laborers call it “fire-stone.”

From the Zanesville Gazette.

MANGEL WURTZEL.

We have received from Judge M'ELHINEY, of Newton township, a fine beet of the mangel wurtzel variety, weighing between 7 & 8 pounds, and measuring more than two feet in length. With the beet we received the following communication, which we take pleasure in publishing; for we are always pleased to have the views of practical men, upon subjects with which they are familiar.

MESRS. PARKE & BENNETT,

Having seen published many strange accounts of the wonderful productiveness of the mangel wurtzel, I was induced to try an experiment with them in our region of country; and through the politeness of A. A. GUTHRIE, of Putnam, I procured some seed from New York and planted about the 20th of May last. The ground on which they were planted is the high, dry and clayey ridge, immediately adjoining the east end of Uniontown, and was prepared in the following manner: first plowed, then harrowed fine, then furrowed out as close as possible in double furrow, that is, running the plow forwards and back in the same furrow, throwing the earth outwards.

I then hauled well rotted stable manure and scattered a suitable quantity in these furrows, and afterwards split the former ridges with the plow, throwing back the earth on the first furrows, so as to form a ridge on the manure. The ridges were then dressed with the hoe and shovel and the seed planted on the ridges about two inches deep and four inches apart. Soon after planting there came a very heavy cold rain, which was succeeded by cold and dry winds, which so baked the ground that the seed came up very irregularly and left at least a fifth of the ground vacant. What came up grew thriftily and looked well, till about the first of August, when the drought set so severely on them that they seemed to be at an entire stand. At this time we tried them, for table use, and found them a tolerable table beet. As I had lost all hope of any considerable yield, I let the family use and sell to the neighbors so as very much to diminish the quantity I should otherwise have had. The light rains that fell about the first of September, however, gave them a second start and they grew far beyond my expectation. I harvested them in the last of October and found many of them weighing from 5 to 7 lbs. I then measured them and found I had 60 bushels left after all the waste that had been made of them. This yield being much greater than I had expected, after encountering so many disadvantages, I was induced to measure the ground on which they grew, and found it to contain 16 square rods or one tenth of an acre. You will see that the product of this experiment was at the rate of 600 bushels to the acre, and I am well satisfied from the foregoing trial, that in a usual season and with ordinary care and culture, we may reasonably expect 1000 bushels to the acre; and they require no other culture than to keep the weeds and grass hoed and pulled out of them. If they are as good for cattle as represented by those acquainted with them, (which we have no reason to doubt,) the product of one acre would keep six or seven milch

cows a whole winter, and make them yield as much milk and butter as the best clover pasture will in summer.

MATHEW M'ELHINEY.

Uniontown Farm, Nov., 1838.

P. S. I should have remarked that on part of the ground I used lime, well mixed with the manure, at the rate of 30 or 40 bush. to the acre; and that the happy effect of lime was discernible to the last row on which it was used. I should also remark that the plants ought not to be suffered to grow nearer than 7 or 8 inches asunder, or should be thinned to that space by taking them out for early use.

M.M'E.

DURHAM CATTLE.

Among the purchasers of Durham Cattle, in Philadelphia, last week, we observe the name of GEO. BRINTON, of Chester county, who bought a cow for \$530. The price of the cows ranged from \$380 to \$540. They had been recently imported from England. The laudable ambition of Mr. B. is worthy of high encomium. No plantation in Chester county, is more calculated to cause one to envy the "farmer's independent lot," than Mr. B's upon the Brandy wine. Comfort smiles around—in the luxuriant soil, and in the princely house and no less princely barn. By the way, it is upon the very spot where the American army opposed the advance of the British at Chadd's ford—and a hole is pointed out in the gable end of the old house, still standing, that was made by a cannon ball. We hope his experiments in rearing Durham Cattle will be successful and lucrative.

The Durham bulls offered at the above sale were withdrawn; we understand, however, that Mr. P. MORRIS, of East Bradford obtained one, "His Grace," at private sale, for \$530.00, which he has annexed to his handsome stock of cattle.

Westchester [Pa.] Village Rec.

NATIONAL SILK GROWERS' CONVENTION.

To the Friends of the Silk Culture.

It having been determined at a meeting of the friends of the cause, held at Philadelphia on the 25th ultimo, in which the states of Pennsylvania, New Jersey and Delaware were represented, that it was important for the furtherance of the silk culture, that a *National Convention* be held at the city of BALTIMORE, on the second Tuesday, the 11th day of December next, it is therefore respectfully suggested, that the Silk growers, and those friendly to the introduction of this branch of industry into our country, take prompt measures to appoint delegates to represent the several sections of our union in said convention. The approaching meeting of Congress will afford the citizens of distant States an opportunity of being represented in that body by their representatives in Congress, and it is therefore submitted to the consideration of those friendly to the cause in those states to avail themselves of the opportunity which will be thus afforded of being so represented.

The spirit which now animates the American people in favor of this enterprise, seems peculiarly to call for a measure of the kind, as it is obvious that a body of practical men coming together

from the remote parts of our country, will be able by their united counsels to lay before our countrymen a vast body of important facts and suggestions, and thus enable them to proceed onward in their holy work with intelligence and zeal.

As the time allowed for the meeting of this *Convention* is short, it is earnestly requested of the friends of the measure, to go to work immediately and make appointments of delegates, as it is of great moment that every section of the country should be fully represented.

Persons having specimens of cocoons, raw silk, sewing silks, or articles manufactured from American raised silk, are requested to send or bring them with them. Those who may have invented reels, looms, or other implements for the preparation or manufacture of silk in any of its forms, would find it to their advantage to exhibit them at the *Convention*, as all such articles will command deep and profound interest from its members, and serve by familiarizing them with their respective uses and operations, to give confidence in the feasibility of fabricating silk goods, and thus confer upon the country the most lasting benefits.

Newspaper editors throughout the country are respectfully requested to insert this notice, and use their influence with their readers to secure prompt and efficient action in the premises.

SILK AGENCY,

Corner of E. and 7th streets, Washington City, D. C.

The subscriber having commenced an Agency for the purchase and sale of SILK MULBERRY TREES, and all articles connected with the growing of Silk, offers for sale the following varieties of Mulberry Trees at Baltimore prices, viz. Multicaulis, Alpine, Broussa, White Italian and Canton; also Mammoth White Silk Worm's Eggs, warranted to be of superior quality. All the recent publications on silk growing for sale, and subscriptions received for the various periodicals devoted to that subject.

no 20

J. F. CALLAN.

CHINESE MORUS MULTICAULIS, &c.

At the Linnæan Gardens, Flushing, New York.



50,000 splendid TREES of the genuine Morus Multicaulis are yet remaining for sale at moderate prices according to their size; and also Cuttings of the same. None of the *Humbug* kind are sold at this establishment. Also 20,000 trees of the splendid Morus Expansa which has very large leaves, greatly loved by the worm, it is very hardy, and yields silk of the first excellence. A great supply of the Moretta or Alpine Mulberry, the Canton, Dandole, Broussa, Asiatic, Pyramidalis, Rose of Lombardy, Morus Alata, and other varieties.

Also Fruit and Ornamental TREES, Plants and Seeds of every kind, and an immense stock of Bulbous Flower Roots, just arrived from Holland.

Silk Worms Eggs of every kind at the lowest prices, and White Italian, Canton, and Moretti or Alpine Mulry Seeds in any quantity. The Morus Multicaulis Trees raised here have one-third more joints and buds than southern trees, and of course are worth 50 per ct. more for propagation; and the wood becomes as mature and perfect on the high exposed position our Nurseries occupy as at any place in the Union. Also, Fruit and Ornamental Trees, Bulbous Roots, Green House Plants, and Seeds of all kinds, for sale in large or small parcels.

Priced catalogues will be sent to every applicant, and orders per mail will be executed with as much precision and dispatch as if the purchasers were present, and will be packed so as to be sent to the remotest region with safety.

no 20 2m

WM PRINCE & SONS.

FARMERS' REPOSITORY OF AGRICULTURAL IMPLEMENTS AND EASTMAN'S CYLINDRICAL STRAW CUTTERS IMPROVED.

THE Subscriber informs the public that he has secured by letters patent his late and very important improvements on his Cylindrical Straw Cutter, by which improvements they are made more durable and easier kept in order. All the machinery being secured to an iron frame the shrinkage, wear and decay of wood is avoided. The feeding part of his improved machine is upon an entire different principle from the former machine; far more durable, requiring neither skill or care to keep it in order. These machines are so constructed as to make the freight on them less than half what it cost to ship the former or wood machines, an important desideratum to purchasers living at a distance; and I now offer it to the public upon the credit of my establishment as the most perfect machine in existence for the same purpose. They are also adapted to cutting rags for paper making, and for cutting tobacco as manufactured by Tobacconists, &c.

I also keep these machines on hand made as heretofore with my new feeding machinery attached to them; and also a general assortment of Agricultural Implements, as, usual. Elliott's Horizontal Wheat Fans, and Fox & Bolland's Threshing Machines are both superior articles.

My stock of Ploughs on hand are not equalled in the city either for quality, quantity, or variety. I have a large assortment of Plough Castings at retail or by the ton, and having an Iron Foundry attached to my establishment can furnish any kind of Plough or Machine Castings on reasonable terms and at a short notice.

All repairs done with punctuality and neatness. On hand, a few Patent Lime Spreaders, Horse Powers, &c. &c.

Also just received, a fresh supply of Landreth's superior Garden Seeds. In store, superior Timothy and Orchard Grass Seed and Seed Oats. All implements in the agricultural line will be furnished by the subscriber, as good and on as reasonable terms as can be had in this city, with a liberal deduction to wholesale purchasers. Likewise will receive orders for Fruit Trees from Mr. S. Reeves' Nursery, New Jersey.

JONATHAN S. EASTMAN,

Pratt street, Baltimore,

Between Charles & Hanover sts.

Feb 20

CHINESE MULBERRY TREES.

American Silk Agency, No. 5, Bank street, Philadelphia.

The subscriber having opened a permanent Agency for the purchase and sale of all articles connected with the culture and manufacture of Silk in the United States, offers for sale all the different varieties of MULBERRY TREES, suitable for raising the SILK WORM; viz: Morus Multicaulis Alpines, Brussa Multicaulis Seedlings, Morus Expansa, Multicaulis Cuttings, Improved Italian Trees, &c. Also, Cuttings from Norton's Virginia Seedlings, and Cunningham's Prince Edward GRAPE VINES. These vines produce an abundant crop of fruit, warranted not to rot or mildew and are fine for the table, and capable of yielding the finest wines.

S. C. CLEVELAND, Agent.

Those who may wish to enter into this profitable branch of national industry, will do well to call at the Agency, and see that they are well instructed in the value of the trees they purchase.

N. B. The particular attention of those engaged in the culture and manufacture of American Silk, whether of trees, Eggs, Cocoons, reeled or manufactured, is called to this agency. The Agent will give every attention to Sales, and prompt remittance of proceeds of any article sent to him. Those who may wish to purchase and enter in this valuable branch of home industry, can obtain from the agent every information, and also such articles as they may want without fear of deception.

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GENUINE BARNITZ PIGS.

The subscriber has for sale the following pigs, which are warranted genuine:

2 pair 4 months old, and

1 pair 10 weeks old.

The Barnitz hogs are distinguished for their early maturity and size, attaining upon clover pasture from 250 to 300 lbs. when 12 and 15 months old. The price of the largest size is \$15 a pair; that of the smallest 10 a pair.

Applications by letter to be POST PAID.

EDWARD P. ROBERTS,
Baltimore, Md.

oc 30

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every Monday

	PER	FROM	TO
BEANS, white field,	bushel.	1 25	
CATTLE, or the hoof,	100lbs	6 50	8 00
CORN, yellow	bushel	81	83
White	"	80	81
COTTON, Virginia,	pound	9	11
North Carolina,	"	9 1/2	11
Upland,	"	9 1/2	11
Louisiana — Alabama	"	11 1/2	12
FEATHERS,	pound.	45	50
FLAXSEED,	bushel.	1 12	
FLOUR & MEAL—Best wh. wh't fam.	barral.	10 00	10 50
Do. do. baker's	"		
SuperHow. st. from stores	"	7 82	7 87
" wagon price,	"	7 62	7 75
City Mills, super	"		
" extra	"	7 75	
Sasquehanna,	"		
Rye,	"	5 50	
Kiln-dried Meal, in hhd.	hhd.	19 00	
do. in bbls.	bbl.	4 00	
GRASS SEEDS, wholes. red Clover,	bushel.		
Kentucky blue	"		
Timothy (herds of the north)	"		
Orchard,	"	2 00	2 50
Tall meadow Oat,	"		3 00
Herds, or red top,	"	90	1 00
HAY, in bulk,	ton.	12 00	16 00
HEMP, country, dew rotted,	pound.	6	7
" water rotted,	"	7	
Hogs, on the hoof,	100lb.	8 50	9 00
Slaughtered,	"		
HOPS—first sort,	pound.	9	
second,	"	7	
refuse,	"	5	
LIME,	bushel.	32	33
MUSTARD SEED, Domestic, —; blk.	"	3 50	4 00
OATS,	"	37	40
PEAS, red eye,	bushel.	1 12	
Black eye,	"	1 00	1 12
Lady,	"		
PLASTER PARIS, in the stone, cargo,	ton.	4 50	
Ground,	barrel.	1 50	
PALMA CRISTA BEAN,	bushel.		
RAGS,	pound.	3	4
RTE,	bushel.	90	93
Susquehanna,	"	none	
TOBACCO, crop, common,	100lbs	4 00	4 50
" brown and red,	"	4 00	6 00
" fine red,	"	8 00	10 00
" wrapper, suitable	"		
for segars,	"	10 00	20 00
" yellow and red,	"	8 00	10 00
" good yellow,	"	8 00	12 90
" fine yellow,	"	12 00	16 00
Seconds, as in quality,	"	6 00	
" ground leaf,	"	5 00	8 00
Virginia,	"	4 50	6 00
Rappahannock,	"		
Kentucky,	"	5 00	8 00
WHEAT, white,	bushel.	1 70	
Red, best	"	1 65	1 67
Maryland	"	1 60	1 65
WHISKEY, 1st pf. in bbls. }	gallon.	44	45
" in hhd. }	"	43	
" wagon price,	"		
WAGON FREIGHTS, to Pittsburgh,	100lbs	2 25	
To Wheeling,	"	2 50	
Wool, Prime & Saxon Fleeces,	pound.	50 to 55	
Full Merino,	"	45 50	
Three fourths Merino,	"	40 45	
One half do	"	35 40	
Common & one fourth Meri.	"	35 40	
Pulled,	"	30 33	
POTATOES, 60 to 70 cts. a bushel.			

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,	barrel.		
BACON, hams, new, Balt. cured	pound.	16	17
Shoulders, do	"	14 1/2	15
Middlings, do	"	14 1/2	15
Assorted, country,	"	14	15
BUTTER, printed, in lbs. & half lbs.	"	31	37 1/2
Roll,	"	25	31 1/2
CIDER,	barrel.	1 75	2 00
CALVES, three to six weeks old	each.	5 00	6 00
Cows, new milch,	"	25 00	40 00
Dry,	"	12 00	15 00
CORN MEAL, for family use,	100lbs.	1 75	
CHOP RYE,	"	1 50	1 60
Eggs,	dozen.	12 1/2	
FISH, Shad, No. 1, Susquehanna,	barrel.	9 75	10 00
No. 2,	"	9 50	
Herrings, salted, No. 1,	"	5 75	
Mackerel, No. 1, ——— No. 2	"	12 50	
No. 3,	"		7 25
Cod, salted,	cwt.	3 25	3 37
LARD,	pound.	14	15

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

		VIRGINIA.
U. S. Bank,	par	
Branch at Baltimore,	do	Farmers Bank of Virgi. par
Other Branches,	do	Bank of Virginia, do
MARYLAND.		Branch at Fredericksburg, do
Banks in Baltimore, par		Petersburg, do
Hagerstown, o		Norfolk, do
Frederick, do		Winchester, do
Westminster, do		Lynchburg, do
Farmers' Bank of Mary'd, do		Danville, do
Do. payable at Easton, do		Bank of Valley, Winch. par
Salisbury, 1 per ct. dis.		Branch at Romney, ... par
Cumberland, par		Do. Charlestown, par
Millington, do		Do. Leesburg, ... par
DISTRICT.		Wheeling Banks, ... 2 1/2
Washington, }		Ohio Banks, generally 3
Georgetown, } Banks, 1/2 p.c.		New Jersey Banks gen. 3
Alexandria, }		New York City, par
PENNSYLVANIA.		New York State, do 1/2
Philadelphia, par		Massachusetts, 1 1/2
Chambersburg, 1/2		Connecticut, 1 1/2
Gettysburg, do		New Hampshire, 1 1/2
Pittsburg, 2 1/2		Maine, 1 1/2
York, 2 1/2		Rhode Island, 1 1/2
Other Pennsylvania Bks. 2		North Carolina, 3 1/2
Delaware [under \$5], 4		South Carolina, 4 1/2
Do. [over 5], 1 1/2		Georgia, 5 1/2
Michigan Banks, 10		New Orleans, 7 1/2
Canadian do, 10		

SPLENDID BLOODED STOCK FOR SALE.

The proprietor of Covington farm will dispose of the following fine bulls on reasonable terms, viz.

One bull two and a half years old.

One do. six months old.

of the improved Durham short horn breed; the dam of the first was got by the celebrated bull Bolivar; for size, form and beauty they are not surpassed by any animal in the state.

Three Devon Bulls, one of which is seven years old next spring, and the largest Devon in the State. The Devons are from the stock of the late Wm. Patterson, and of undoubted purity.

Two half Devon bulls.

Two bulls half improved Durham short horn, and half Devon.

One splendid bull, a cross of the Bakewell, Alderney and Devon.

One bull, half Alderney and half Holstein.

These fine animals may be seen at Covington farm, near Petersburg, Frederick county, Md. on application to James L. Hawkins, Baltimore, or to

se 11 f FREDERICK EBERT, Manager.

SPRING CLOVER SEED,

Just received and for sale, by

R. SINCLAIR, Jr. & Co.

oct. 16 3

FOR SALE,

A valuable FARM of prime soil, on the Western Run in Baltimore county, about two miles north west of the 14th mile stone of the Baltimore and York turnpike road, and at the same distance from the depot of the Baltimore and Susquehanna rail road, at Cockey's tavern, in a rich, highly cultivated and healthy tract of country.

This farm contains from 260 to 270 acres, having a full proportion in wood, much of which is building timber, peculiarly valuable in that neighborhood; is in the best state of cultivation; a considerable part in productive timothy meadow, and the residue of the arable land, not in grain, is well set in clover, the whole under good fencing, laid off into convenient fields, each of which is well watered. The farm has a large quarry of excellent building stone. There are on the premises an apple orchard of select fruit trees, which seldom fail to bear abundantly; a valuable mill seat on the Western Run, with a race already dug. There is no location in the country more favorable for a grist mill, having the advantage of a rich and thickly settled neighborhood, and a good public road leading thence to the turnpike road. Buildings substantial and convenient, being a STONE DWELLING, and kitchen of two stories; a large stone Swiss barn, with cedar roof and extensive stabling below; large hay house and stable for cattle; stone mill house near the dwelling, with a spring of fine never failing water, with other out-houses. On the country road near the mill-seat a good house and shop for a mechanic, under rent to a good tenant. It is well known the lands on the Western Run are in every respect equal, if not superior to any in the county. Adjoining or near are the lands of Col. N. Bosley, Daniel Bosley, Thos. Matthews and others. The water power, with about 20 acres of land, is so situated that they may be detached and sold separately, without injury to the rest of the farm for agricultural purposes. Terms of sale will be liberal. Apply to

NATHANIEL CHILDS,

on the premises, or to

WILLIAM J. WARD,

oc 23 if Fayette, near Calvert st. Baltimore.

TO THE PUBLIC.

Try the New Agricultural Establishment in

Grant-street, next door to Dinsmore and Kyle.

Every article warranted to be first rate. The subscribers, grateful for past favors, take this early opportunity of returning their thanks to their customers and the public in general and beg leave to inform them that they are now provided with a very extensive stock of newly manufactured AGRICULTURAL IMPLEMENTS, suitable to meet the call of Farmers, Gardeners, Merchants, Captains of vessels, and others, viz: 1000 Ploughs, assorted sizes, from \$4 to \$15 each, comprising of the old common Bar Shear, Winand's Self Sharpener; Woods & Freeborn's patent, all sizes, "Davis," "Sinclair & Moore's" improved Hill Side Ploughs, highly esteemed for turning the furrow down hill, with wrought or cast shears; Wheat Fans, of various sizes and patterns, from \$15 to \$50 each, warranted to separate the garlic from the wheat; Corn Shellers, from \$12 to \$20; Cutting Boxes, from \$7 to \$50 each; Corn and Tobacco Cultivators, large and small; Expanding do., Wheat Cradles warranted to have fingers of the natural growth, and Grass Seythes, &c. &c.; Castings, of all descriptions and patterns, by the lb. or ton, to suit customers, allowing a liberal discount to merchants buying to sell again—all of which will be furnished on the most pleasing terms and every article warranted to be of the best quality, in proportion to the cost price. All orders by mail or otherwise shall be duly attended to with the greatest despatch.

We would particularly call the attention of Country Merchants and others, wishing to purchase agricultural implements to sell again, to the fact, that we will furnish them with articles on better terms than they can be supplied at any other establishment in the city. Our assortment is complete and as varied as that of the most extensive concern in Baltimore.

We have also connected in its operations with the above branch of business a complete assortment of FIELD AND GARDEN SEEDS, kept by Thomas Denny—Also Garden and Farm Tools, of various sorts and of the choicest collection, which will enable our customers to have filled entire all orders in the Agricultural and Seed Departments. mh 26 JOHN T. DURDING & Co.

A HALF DURHAM COW FOR SALE.

The subscriber has for sale a beautiful fashionable roan half Durham Cow. She is fresh in milk and only 4 years old. Her price is \$75. Applications, post-paid, to be made to

ED. P. ROBERTS.

Who has also for sale several full bred Devons, males and females.

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THE FARMER & GARDENER.

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, E. P. ROBERTS AND SAMUEL SANDS—EDITED BY E. P. ROBERTS.

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Vol. V.

THIS publication is the successor of the late **AMERICAN FARMER** and is published at the office, at the N. W. corner of Baltimore and North streets, over the Patriot office, at two DOLLARS AND FIFTY CENTS per annum, if paid within one month from the time of subscribing, or \$3 if after that time. All letters to be post paid.

BALTIMORE: TUESDAY, NOV. 27, 1838.

Our Silk Manual—We have in press the third edition of our Silk Manual, which will be ready for delivery in a few weeks. Persons at a distance in forwarding their orders will please be particular in designating the mode of conveyance. We solicit from the friends of the silk culture their aid in the dissemination of the *Manual*, as we believe we can with confidence recommend it as worthy of their patronage. The editor has bestowed much thought and research on the subject, and has had considerable practical experience in the culture of the mulberry—and whatever new light has been presented to his view since the publication of the former edition, will be embraced in the present. It is the intention, if it be found practicable, without omitting any thing of material importance, to reduce the quantity of matter contained in the work, in order to place it at a lower price than formerly, the more readily to ensure its extensive circulation.

Hydrophobia—As this horrible malady has hitherto been deemed incurable, and the report of the successful treatment of a case, which will be found in another part of this paper, would seem to indicate that an antidote has at last been found, we have felt it our duty to give it a place.

THE SILK-GROWERS' CONVENTION.

We republic below, the call of a Convention of the friends of the Silk Culture, to be held in the city of Baltimore, on Tuesday, the 11th day of December next, and believing the object one well calculated to advance the interests and promote the prosperity of our country, we take unfeigned pleasure in commending it to the attention of our readers. We would again remark, that "we have long looked forward, with anxious solicitude, to the day when the silk culture would form a branch of our husbandry—to that end we have labored with untiring zeal—and the anticipated action of the approaching convention, impress us

with the hope that it will be the means of giving such an impetus to the silk business proper, as will place it beyond the reach of those casualties, which too often retard the advance of new enterprises." "It is one which holds out that glorious neutral ground on which all, of every party, may meet as brethren and friends—where no jarring interests—no discordant feelings can pervade, to frustrate the object in view. It opens to all a thrice noble theatre of action, on which each may vie with the other in his desire of merging the partizan in the patriot. It is a subject that calls upon every man, who loves his country for his country's sake, to step forward and with holy zeal, further and promote it. With our belief of its high claims to the fostering care of every one who is a true American at heart, we commit it to the nurturing of our countrymen, under the fond belief, that it will be received in kindness and cherished with patriotic care."

NATIONAL SILK GROWERS' CONVENTION.

To the Friends of the Silk Culture.

It having been determined at a meeting of the friends of the cause, held at Philadelphia on the 25th ultimo, in which the states of Pennsylvania, New Jersey and Delaware were represented, that it was important for the furtherance of the silk culture, that a *National Convention* be held at the city of BALTIMORE, on the second Tuesday, the 11th day of December next, it is therefore respectfully suggested, that the Silk growers, and those friendly to the introduction of this branch of industry into our country, take prompt measures to appoint delegates to represent the several sections of our union in said convention. The approaching meeting of Congress will afford the citizens of distant States an opportunity of being represented in that body by their representatives in Congress, and it is therefore submitted to the consideration of those friendly to the cause in those states to avail themselves of the opportunity which will be thus afforded of being so represented.

The spirit which now animates the American people in favor of this enterprise, seems peculiarly to call for a measure of the kind, as it is obvious that a body of practical men coming together from the remote parts of our country, will be able by their united counsels to lay before our countrymen a vast body of important facts and suggestions, and thus enable them to proceed onward in their holy work with intelligence and zeal.

As the time allowed for the meeting of this

Convention is short, it is earnestly requested of the friends of the measure, to go to work immediately and make appointments of delegates, as it is of great moment that every section of the country should be fully represented.

Persons having specimens of cocoons, raw silk, sewing silks, or articles manufactured from American raised silk, are requested to send or bring them with them. Those who may have invented reels, looms, or other implements for the preparation or manufacture of silk in any of its forms, would find it to their advantage to exhibit them at the *Convention*, as all such articles will command deep and profound interest from its members, and serve by familiarizing them with their respective uses and operations, to give confidence in the feasibility of fabricating silk goods, and thus confer upon the country the most lasting benefits.

AMERICAN SILK.

THE REASONS WHY IT CAN COMPETE WITH FOREIGN.

From the National Gazette.

Can the cultivation of silk be profitably carried on in the United States? Such is the question that is almost daily asked by those who see that in engaging therein the people of this country, in which wages are higher than in any other part of the world, must compete with those of India, in which wages are lower than in any other part; and as it is a matter of some importance to come to a right conclusion, we deem it not amiss to offer to our readers a few remarks for their consideration.

The reason why the money price of labor is high in the United States is, that it is aided to so great an extent by capital, skill and intelligence, and therefore produces a large quantity of the commodities for which other nations are unwilling to give gold and silver; and the reason why its price is low in India and France is that there is an absence of capital, skill and intelligence, and the laborer produces a very small quantity of commodities to be exchanged with other nations for the precious metals. We do not pay a mechanic or laborer high wages because he chooses to demand them, but because we know that we can obtain from him in return some commodity that we can exchange with others for the price we have paid, and with a profit as compensation for our trouble.

In those countries in which the money price of labor is high, the capitalist is enabled to live well, and rapidly to increase his means, as in England and in the United States. In those in which it is low, the capitalist cannot live so well, nor is there so rapid an increase of capital. Such is the case in India and in France. To the capitalist, therefore, the labor of the United States and England is cheap, although he pays a high price for it, be-

cause it yields largely; while that of France and India is *dear*, although low priced, because it yields so little.

In confirmation of this view we will now call attention to the fact, that in the manufacture of cotton and in the sailing of ships, we are nothing for the competition of India, or of the nations on the Baltic, where labor is low-priced and unproductive, but we do care for the competition of England, whose labor is almost as high priced as our own; and England looks with more anxiety to our competition in every department of industry than to that of any other nation of the world, although our labor is so much higher priced than her own.

Our competitors in the production of Cotton are the people of India and Egypt, the two countries in which labor is lowest priced, yet there is in fact hardly any competition. The whaling trade is open to all the world, yet that of the United States has steadily risen while that of all other nations has as steadily declined. The lower priced labor of France, or that of the north of Europe, cannot compete with that of New England, in which it is highest. The capitalist who pays these high wages lives in affluence on the profit of his ships, while the owner of the dull ships of the north of Europe finds it exceedingly difficult to improve his condition. The labor for which the latter pays is low-priced, but it is unproductive and *dear*, and allows him but a small return for his capital.

Our readers will now, we think, be satisfied that a high rate of wages presents no obstacle to prosecuting successfully the culture of silk, in which we may reasonably suppose that capital, skill and intelligence will produce the same effects that have been exhibited in every other department of production in which the people of the United States have engaged, when not driven thereto by legislative restrictions. So far, indeed, are the low wages of other countries from presenting an obstacle to its cultivation in this, that it will be due to the fact that we compete with such nations only, that it will for a long time be highly productive. When we undertake to compete with England in any department of production, any improvement that is made is immediately adopted by our rivals, who are thus enabled to produce as cheaply as ourselves, and *vice versa*—whereas, years are required for its introduction in France, Germany, and Italy, because in those countries there is little capital, and a want of that intelligence which is required for the adoption of improvements. If England were the great cultivator of silk, we might be sure that she would always follow closely upon our heels, and that her product would keep pace with our own; but in competing with France, Italy and India, the case is widely different. An improvement that would pass in a year or two throughout the U. States, would require twenty years for its general adoption in France, and half a century or more for its adoption in India. The cotton gin has now been in use for nearly half a century, and yet the people of India still use a small rude hand-mill, turned by women. Improvements in relation to the Silk culture, similar in their effects to those of Whitney's great invention in relation to cotton, are now, we understand, going on in the United States, and we hazard little in saying that as the

cost of cotton and cotton manufactures has been reduced by the nations whose labor is highest in price, so will the cost of silk and of silken manufactures be reduced, now that the production of the raw material has been undertaken in a country in which labor is productive and wages are high. We see no reason to doubt that the same effect will be produced in the next half century that has been exhibited in the last fifty years in regard to cotton, by which silk will be rendered almost as accessible to all classes of the community as cotton now is, a consummation most devoutly to be wished.

MR. RUFFIN'S REPORT ON AGRICULTURE.

At the Commercial Convention lately held in Richmond, Virginia, the Committee on Agriculture made the following Report:

The duty assigned to the Committee on Agriculture was so suddenly and unexpectedly imposed, that there can be little confidence entertained in its being properly or acceptably discharged. The performance of the duty is therefore attempted with reluctance; and no effort would have been made, but for the respect to the commands of this convention. It is not that there are not abundant and weighty materials, both of facts and of argument, for a report on this subject, and which might demonstrate the importance of the improvement of agriculture to the commercial and general interests of Virginia, and the necessity for legislative aid being asked and granted, to promote such improvement. But as your committee are instructed and called upon forthwith to act, without access to authorities on agricultural statistics, or any other materials that would need reference and examination, they are sensible that they can as little do justice to the subject, as they can hope, in this or any better manner, to exert influence on the legislature of the State for the benefit of agriculture.

Besides these difficulties, your committee are at some loss to know the precise kind of inquiry and labor required of them, by the very concise and general terms of the resolution, which directs the formation and action of the committee. And even if they should not mistake the direction of their duty, they may err by overstepping their proper limits. The interests and the claims of agriculture, are even more important than any and all others that this body will endeavor to aid; but still your committee must bear in mind, that the primary and main design of this convention is to re-establish the commerce of Virginia; and that other objects and interests, however important in other respects, should *here* be treated as merely subsidiary to, or in connection with, the commercial business and interest of the country.

Whatever can be done to aid the commerce, the manufactures, the canals and railways of the country, in a legitimate and proper manner, will operate to increase the profits, and thereby encourage the improvement of agriculture. Still more truly, because admitting of no exception, may it be affirmed, that whatever will extend the knowledge and promote the improvement of agriculture, will, in proportion to that direct effect produced, also act indirectly to improve the commercial and manufacturing interests of the

country. Neither of these trueisms need more than to be announced. From such premises, it follows that the promotion of agricultural instruction and improvement are proper subjects for the notice and favor of this convention, as an important mean for advancing the interests of commerce, the especial object of the assembling of this body. And even on this ground, though it be far less important than others, (which would be out of place if presented *here*.) there would be found sufficient means for the legislature to extend to agriculture that fostering care which, by a narrow and niggardly policy, has heretofore been refused.

When aid to agricultural improvement was asked, at several of the recent sessions of the legislature of Virginia, the claim was but feebly sustained by its friends, and met with neglect, or derision and contempt from all others. The former were at a loss to determine what particular measures of relief to propose or support; and the latter class have deemed it a sufficient answer to *misapply* the old saying of "*laissez nous faire*," declaring that the best thing for agriculture is to "let it alone." Your committee claim to be as true disciples of the free trade school of political economy as those who thus misapply and abuse this doctrine; and they fully concur in the propriety of leaving all pursuits of industry, untrammelled by legislative bounties, to their own direction and their own rewards. But agriculture does not want, nor have its advocates asked for, any pecuniary or other support, except for the purpose of diffusing knowledge, and to induce and extend instruction; and this your committee maintain to be one of the few legitimate and proper subjects for governmental action, even according to the most strict doctrine and limitation of sound political economy. If it be pronounced to be proper that the government should refuse to aid in diffusing light and instruction in agriculture, as a correct deduction from the "let-alone" policy, then it is no less necessary that it should abandon, as a matter of consistency, the giving of all or any aid to primary schools and to colleges, for the purpose of literary instruction and education in general.

It would be more difficult, within the narrow bounds prescribed by propriety to this report, to answer the friends than the enemies to the improvement of agriculture by legislative action. In reply to their inquiry, "what can the legislature do to improve agriculture?" your committee will merely state, in general terms, that every means will be useful and profitable by which light and knowledge will be diffused; and that no other action, no other aid or boon is desirable, or would be beneficial. There are so many valuable modes of diffusing agricultural knowledge, that the difficulty is not to find, but to choose among them. Boards of agriculture, agricultural societies, and premiums upon a suitable and judicious plan, agricultural schools and experimental farms, and agricultural publications, each and all, elsewhere, have worked admirably to forward the great end in view. But if no more were done at first, by legislative action, than the institution of a board of agriculture, as merely an investigating, consulting, and advising body, incalculable benefit might be expected to grow out of this one and cheap mode. Such a board (if the system of fur

nishing aid should go no farther) might be limited in annual expense to \$1500, or barely more than the General Assembly has spent, year after year, merely in the time used for electing an individual to execute the mechanical business of printing the journals and documents—less than the expense of time and money caused by each single elaborate speech delivered in that body upon federal relations—not one-fourth part of the annual expense of the geological survey—and perhaps not one hundredth part of the money wasted in every session in useless, or worse than useless, debate.

With these views, and the earnest hope that the recommendation of this highly respectable convention may have more influence on the legislature than any previous expressions of opinion, or petitions of separate or private individuals, to induce the commencement of the great work of diffusing agricultural instruction and improvement, your committee recommend for the adoption of this convention the following resolution:

Resolved, as the opinion of this Convention, that the commercial and general interest of Virginia and North Carolina, as well as the peculiar interests of the agricultural class, require that legislative aid should be given, promptly and effectually, to the diffusion of agricultural instruction and knowledge, and to the promotion of agricultural improvement.

From the Yankee Farmer.

AGRICULTURAL IMPROVEMENT.

What was our country two centuries ago? What is she now? Then she scarcely knew the footsteps of civilized man. Her vast forests were the joint domain of wild beasts and savage Indian tribes. A long period elapsed, before the earth produced a sufficient supply for the thin white population that first inhabited these Atlantic shores. Improvement in agriculture was reserved for a late period. Comparatively but little attention has been paid to this most important subject, until within the last half century. Even now at this enlightened age, it is too much neglected, although more has been effected within the last twenty-five years for the advancement of agriculture, than was done for a century and a half before. Still the progress in agriculture has not, in this country, been equal to that in various other pursuits of industry. And, in comparison with England or France, we are probably half a century behind them in agricultural improvements. It, therefore, behoves the friends of our national prosperity to lend a fostering hand; for it must be admitted, that agriculture is the grand basis of all other useful human pursuits. Without it none can flourish. We are far from asserting that the success of agriculture is not dependent upon that of other pursuits. They are mutually dependent upon each other, in a great variety of ways, too numerous to specify here. Were either commerce or manufactures destroyed, agriculture would necessarily decline, and the human family would return to a semi-barbarous, or, perhaps, savage state. The lights of science, or in other words, of knowledge, are also indispensable to agricultural improvement. And it is a matter of the highest importance, that all Farmers should be fully convinced of this truth. The aggregate

good and prosperity of the whole, is the most effectually promoted by encouraging all laudable pursuits of honest industry. Malthus admits that "*labor is the only source of wealth.*" But he was not the first discoverer of this truth. It is a truth almost self evident, and must have been admitted by all nations that arrived at a high state of civilization, and cultivated the arts and sciences.

Silver and gold, or money of any kind, do not, in and of themselves, constitute national wealth; they are only the signs or standards of value. The products of the earth, raised and fitted by the hand of labor for and to our wants, conveniences and comforts, cause wealth and happiness to flow in upon us. Should these products remain in the hands of the producer, whether farmer or mechanic, they would be of but little use or avail. Hence the importance and necessity of the merchant, who promotes the interests of the whole, by exchanging the surplus products, and supplying those who stand in need. Commerce is, therefore, rightfully considered to be the handmaid of agriculture and manufactures.

In taking a view of the present condition of our country, our hearts ought to be filled with gratitude to the Author of all good, that it is our lot to dwell in the finest country, and under the mildest and most liberal Government in the world. Perhaps most of us cannot, or do not, fully appreciate our high privileges. Here the farmer's hard earnings are not wrested from him to support a pampered nobility in idleness, luxury, and affluence; but every man can enjoy the fruits of his own labor. What strong motives, therefore, have our farmers to increase their agricultural products! To do this, they ought to adopt the improvements correspondent to the age in which we live. The history of nations shows that such improvements have been, in some measure, proportionate to the increase of population. With this idea, let us turn our attention to the increase here. The fact admits of no doubt, that our population has gone on doubling about once in 20 or 25 years, since the settlement of the country. Should the increase continue in the same ratio the next 25 years, what a vast population will dwell within our territorial limits! Consider also how diversified are our pursuits! How large a proportion of our population are engaged in our numerous manufacturing establishments, as well as in various other mechanic arts! View our thronged cities and populous villages in every section of our land, all of which are dependent for the means of subsistence upon the products of agriculture. Other classes, too, embracing a large portion of our population, are equally dependent. These considerations convince us that the produce of our farms will, for a long period, command a high price—a price sufficiently high to afford a powerful stimulus not only to increase the quantity, but to make great improvements. Those who will suggest and publish improvements through the medium of our agricultural papers, for the benefit of our farmers, will promote their country's welfare vastly more than do the political conflicts of aspiring politicians. Information is wanted. No matter from what source or from what country it comes. Spread before us all the best modes of cultivation which have been adopted in our own country and in England, France, Holland, Germany, or elsewhere. Give us the reasons, and the

proofs of the utility of such improvements, and then we would gladly adopt them, and as readily lay aside the old methods, which our fathers have handed down to us.

Great improvements may be effected through the instrumentality of Agricultural Societies, or associations among the most intelligent farmers; but it seems to us that still greater benefits may be derived from our numerous and ably conducted agricultural papers. In them we may read and carefully reflect upon the best written essays, as well as speculative theories. After a few years of attentive reading and reflection, we may have a storehouse of useful knowledge, to direct us in all our different rural operations. Although incorrect theories may sometimes be published, they are not without some use. We carefully reflect upon the same, and point out the errors and fallacies, and close reasoning upon the subjects will finally lead us in the right way. Reasoning and reflection are as important and beneficial to the farmer as to the lawyer or statesman.

FABIUS.

From the Educator.

HUMIN, OR GEINE, THE FOOD OF PLANTS.

Humin, as the nutritive principle of soils, first attracted the attention of Sprengel, a German agricultural writer, in the exudation from the bark of the elm, and was called by him ulmin, from the botanical name of the tree from which he obtained it. It has also been called humus, humic acid, vegetable extract, vegetable mould, and by the great Swedish Chemist Berzelus, geine, a name recently re-applied, and which it is probable from his popularity in the department of nomenclature, it will hereafter retain.

Geine procured in a separate state, is found to be dark, unctuous, mostly uniform, and somewhat pliable substance. It is formed from the decomposition of organic matter, both vegetable and animal, and contains essentially oxygen, hydrogen, and carbon, "when of vegetable origin, and nitrogen in addition when of animal product." These elementary substances, it will be recollected, are also the essential ingredients of all organized matter. By the vegetable kingdom, they are absorbed chiefly from the geine of the soil, and in part from the atmosphere in the process of respiration. The atmosphere is wholly inadequate to supply the requisite nourishment, notwithstanding some experiments proving that plants will grow in a pure silicious earth, being nourished by moisture and the carbonic acid of the atmosphere; for it is well known that no profitable culture can be carried on without the presence of geine, which has been appropriately called "the cooked food of plants." The saline and earthy ingredients of the soil described in the last number of the Educator are likewise wholly incompetent to the wholesome nourishment of plants, but are necessary to produce certain changes in the geine, forming with it soluble compounds, or bringing it to that state which is best adapted to their nutrition. In its simple state it is a neutral substance, possessing neither acid (erroneously called an acid formerly) nor alkaline properties, and often altogether insoluble till combined with or changed by the earths or alkalies. The relation of the salts and earths to this substance will be given in a future num-

ber, and the manner in which the whole act as fertilizing agents explained so far as chemical science has instructed us.

In agriculture geine is chiefly furnished to the soil by the decomposition of plants, and by manures. It is continually decreasing in cultivated fields with the growth of each harvest, both from its absorption by the crop, as well as by the washing of rains. In bad farming the soil is almost entirely exhausted of it, and can have its fertility restored only by the free application of manure, or fresh vegetable matter. G.

From the Genesee Farmer.

ON BREEDING HORSES.

In the 26th No. of the current volume, I noticed an article cost of rearing horses, in which the writer confines his remarks almost exclusively to the pure racer, a breed that, except just for the sake of tracing blood, the great mass of stock growers can ever have very little interest in. This as now managed, is but a gambling concern, and it is perfectly evident, as at Rouge et Noir, or Dice, or Farro, there must be great loss somewhere. And, besides, if this were not the case, in my humble judgment, we should greatly err in selecting to cross with the common mares of the country, the long light bodied and leggy racer, but rather the stout compact hunter or roadster, of as pure blood and as high pedigree as could be found. These horses abound in England, and can be had at fair rates, and though it would hardly pay, suppose we affix the price of service, insured, as with Bellfounder, at \$20 00

Cost of a fine common mare \$150, interest on which at 8 per cent. is 10 00

I do not estimate the keep and wear of her at any thing, as she can bring a good colt every year, with a loss in lying still of not over three or four months, leaving the rest of her time for working, during which she could much more than earn her living, and deterioration of age, in fact, on this point be a source of profit to the owner. The colt should have the best of pasture during summer, and hay and two quarts of oats, with a very few roots per day during winter. I will allow one ton of hay for the first, and two for the three succeeding winters bringing the colt to four years old, and making seven tons, which upon an average does not cost the farmer over \$5,

Two quarts of oats per day during winter, is say 12 bushels, or 48 bushels for four years; these perhaps cost 20 cents,

Pasturage three summers, the first one, it being a suckling colt, is not considered, at \$5,

The manure is worth the grooming through the winters, and a colt may be very well bitted and broken for,

Now such animals would be worth on an average from \$200 to \$300 each, and when they make good match horses, something more. We will

say, however, \$250 per head, for five years would be, \$1,250 00
Cost of production for five horses, say, \$500
Allow a loss of one out of 5, 250

Leaving a gain of \$500 00

This would be a profit of about \$67 per annum on the cost of the mare, and even allow, if you please, something more for expenses and accidents still I believe that the raising of good roadsters may be very profitable to the farmer, and this is the only breed that at present is worth his cultivation.

Bellfounder, I am happy to say, is getting to be highly appreciated around us. His stock in this country makes its first appearance this spring, and even for ordinary mares is highly promising. Every colt is a bright bay, and in shape and figure takes much after the horse. Our Barefoot and Messenger fillies have each a splendid horse colt, that, I trust, will one of these days do credit both to sire and dams. He has had a fine season of it thus far, and gentlemen have had the taste to supply his harem from the distance of one hundred miles east, to that of two hundred west of us, and we are mistaken, if they are not well compensated for their trouble in so doing. His colts, when grown with care, cannot but show well in harness or under the saddle, and for roadster, strength, speed and bottom, it will be difficult to match them.

We were so unfortunate as to lose Bellport the fore part of last month. He was suddenly taken with excruciating pains in his stable at Batavia, and tho' he had the best of attention, he died in about thirty six hours. The symptoms of his attack, and a post mortem examination, left no doubt that he was poisoned by some miscreant that got access to his food in the absence of his groom. We did not feel the loss half as much to ourselves, individually, as for the public. It must ever be a matter of regret, that a horse should be done to death in so wanton and inhuman a manner.

A. B. ALLEN.

Buffalo, July 23, 1838.

METHOD OF ASCERTAINING THE WEIGHT OF CATTLE WHILE LIVING.

This is of the utmost utility for all those who are not experienced judges by the eye, and by the following directions the weight can be ascertained within a mere trifle. Take a string, put it round the beast, standing square, just behind the shoulder blade; measure on a foot rule the feet and inches the animal is in circumference; this is called the girth; then with the string measure from the bone of the tail which plumbs the line with the hinder part of the buttocks; direct the line along the back to the forepart of the shoulder blade; take the dimensions on the foot rule as before, which is the length, and work the figures in the following manner: girth of the bullock, 6ft. 4in.; length 5ft. 3in.; which multiplied together, make 34 square superficial feet; that again multiplied by 23 (the number of pounds allowed to each superficial foot of all cattle measuring less than five feet in girth) makes 713 lbs. and allow-

ing 14 pounds to the stone, is 50 stone 13 lbs.—Where the animal measures less than 9 and more than 8 in girth, 31 is the number of pounds to each superficial foot. Again, suppose a pig or any small beast should measure two feet in girth and two feet along the back, which multiplied together, makes four square feet; that multiplied by eleven, the number of pounds allowed for each square foot of cattle measuring less than three in girth, makes 44 lbs., which divided by 14 bring it to stones, is three stones to two pounds. Again, suppose a calf, sheep, &c., should measure four feet six inches in girth, and three feet nine inches in length, which multiplied together makes sixteen and a half square feet; that multiplied by sixteen, the number of pounds allowed to all cattle measuring less than five feet and more than three in girth, makes 265 pounds; which divided by fourteen, to bring it into stones, is eighteen stone and twelve pounds. The dimensions of the girth and length of black cattle, sheep, calves, or hogs, may be as exactly taken this way, as is at all necessary for any computation or valuation of stock, and will answer exactly to the four quarters, sinking the offal, and which every man who can get even a bit of chalk may easily perform.—A deduction must be made for a half fatted beast, or of one stone in twenty, from that of a fat one; and for a cow that had calves, one stone must be allowed, and another for not being properly fat.—*Cattle Keeper's Guide.*

DOCILITY AND INTELLIGENCE OF THE OX.

The common charge of stupidity urged against the patient and much enduring ox, is wholly unfounded, or, if true, is only so of those breeds or individuals, with which no pains have been taken to cultivate and improve their natural instincts. Scarcely can the horse itself boast a higher degree of tractability or intelligence than this animal, when its powers are excited and educated.—In proof of this, we need only refer to the faithful Backley of the Caffra tribes, whose services in the field or in war, as the keeper of his master's herds, his protector from robbers, or the fighter of his battles, render him an invaluable possession to those semi-barbarous hordes. We need not however, go so far from home for proofs of intelligence; the Devonshire oxen, which are almost exclusively employed in the labors of husbandry, exhibit a high degree of docility, and other mental qualities, which admirably fit them for the performances of such services. There are many amusing anecdotes recorded of this animal, to which I beg to add the following, which was witnessed by a lady, a near relation of mine. A cow, which was feeding tranquilly in a pasture, the gate of which was open to the road, was much annoyed by a mischievous boy, who amused himself by throwing stones at the peaceful animal: who, after bearing with his impertinence for some time, at length went up to him, hooked the end of her horn into his clothes, and lifting him from the ground, carried him out of the field, and laid him down in the road; she then calmly returned to her pasture, leaving him quiet for a severe fright and a torn garment.—*Bell's British Quadrupeds.*

A good maxim is never out of season.

From the New York Sunday News.

HYDROPHOBIA.

We last week promised to lay before our readers a detailed account of a recent case of this most horrible and much-dreaded disease which, a few days since, occurred in this city, and to show that a remedy is to be had which may be depended upon as a certain cure. We, really, from circumstances which have deeply interested ourselves, feel bound to lay the testimony of the matter referred to before our readers; and as we are well advised on the subject, and know that no remedy of effect has yet been discovered as applicable to such cases, are impressed that it is our duty to announce to the world the fact that hydrophobia, or canine madness, is harmless, and can be controlled. Below, we give the testimony of the case referred to as given to us, and the result of our own inquiry:

For some days past, the inhabitants in the neighborhood of the Deaf and Dumb Asylum, have been much excited by the occurrence among them of a case of Hydrophobia of the most horrible and alarming description, attended with circumstances more frightful and appalling than any that have taken place in this community for many years. The unfortunate sufferer from this dreadful malady is a young lady named Miss Ann Dickers, the daughter of a highly respectable Quaker farmer, residing on the Middle Road, well known to all the old residents of that part of the island. It appears that in the month of April last, she was bitten by a dog which had been given to the family by a neighbor named Clouse, but which circumstance she did not at the time make known to any one, in consequence of her father having frequently warned her against playing with dogs, she being fond of sporting with and teasing them. Soon after receiving this bite, the dog, which had previously exhibited symptoms of being rabid, disappeared, and nothing more has since been heard of it. The injury being slight, Miss D. thought no more of it, and until Sunday evening last, as it will appear by the subjoined testimony, she enjoyed apparently good health and buoyancy of spirits: what befel her then, and how dreadful the agonies she has suffered, will be best told in the language of those who have from the commencement been her bedside attendants. Shocking as it is to contemplate the awful calamities that poor humanity is occasionally subjected to, it must be a source of gratulation to every good man, and a theme for gratitude to Divine Providence, that a preparation has at length been discovered which promises to be an effectual remedy for this most horrible of all afflictions, and which men of science, philanthropists and others in every part of the world have long sought after in vain. It will be seen that notwithstanding the exertions of all the eminent medical men, (Drs. M'Nevin & Son, Baldwin, Lindsey, Sargent Rawson and others) whose aid was obtained on this occasion, no good was effected, no hope of success existed, until Mr. Jennison's applications of the specific which has produced such an astonishing result. The examination of the following persons has been specially reported, so that no doubt shall encumber the minds even of the most sceptical and prejudiced, as to the true nature of the disease under which this young lady suffered, and of the successful operation of the novel and peculiar remedy which was applied.

Miss Roxcelleenah Dickers being examined, deposed as follows:—My sister Ann, now under the care of Mr. Jennison, is almost twenty years of age. Up to Sunday evening last, (first day, as we call it) she had enjoyed excellent health and spirits, with the exception of occasionally complaining of a headache. On Sunday, before dinner, she complained of headache, and could not be persuaded to eat anything but a little piece of mince-pie, which she afterward said did not agree with her. My sister and I went to our room to dress, and took a pail of water with us; and it occurred to us, from what subsequently took place, that the sight of this had distressed her, for she immediately left the room and went to another one. I did not see her again until near four o'clock, when she told me she had been lying down. It was her custom to get tea ready for the family, and I asked her to set the kettle on; she begged of me to do it, as she did not feel able to go and bring the water. After some objection, I eventually did it. When tea was ready, she poured it out for us, but did not drink any herself. After father and mother had gone to bed, she observed me taking some meat from the stove, and on seeing the gravy, she appeared to look wild, and started off. I followed, to ask what was the matter; and I found her standing in the dark, alone. I said "Anna, dear, what is the matter?" and she said—"Let us go to bed." We did so with our other sister, and when we got up stairs, we found our bed was not made; she insisted upon helping us to make it, and after this was done, she was the first to get undressed and be in bed—She was restless and uneasy, and remarked—"Ah! Roxcelleenah, thee will not like to see me long." I became alarmed at her manner, and begged her to tell me what ailed her. She started up and wildly exclaimed—"Go out, all of you—fly! fly! fly!" At the same time intimating she was mad, and unless we got out of her way she would injure us. We all ran up in a fright, seeing she was in dreadful spasms, the foam coming in thick masses from her mouth, her eyes glaring, and her whole appearance being altered. We had heard and read of cases of Hydrophobia, and became certain that she was so attacked; and believing that it was impossible to cure it, we were in great distress, and made so much noise in crying, that father came to the door and asked what was the matter. We were afraid to let him in at first, but he insisted, upon knowing all about it. The door was at length opened. When Ann saw him, the spasms came again so shockingly that he ran out half-dressed, for assistance, she begging him to get a cord and tie her arms to prevent her hurting any one. He went and got a cord, and brought a number of men with him to the room; but all of them appeared afraid to go near her. At last father went up to her; and she voluntarily held her arms back to be tied, and one of the men did go up and help to do it. She then threw herself wildly on the bed, her face downward, and began to bite and tear the pillows and bed-clothes. After the first spasm, she repeatedly exclaimed, "Oh! it's Clouse's dog!—it's Clouse's dog!—it's all over with me—I know it is!—'twas Clouse's dog!" This was the first that we had known about her having been injured by that dog. She had been bitten in the nose three or four days before her illness by a little pet dog, but we thought

that had got well. Her distress appeared to be a most exclusively confined to her throat. Her eye became wild, and her appearance was sadly changed. Her barking, howling and growling were hideous, and exactly like a dog. One of the persons who was in the room when she was down in the bed refused to assist in turning her, saying it was of no use; he was horror-struck at her condition, and said he would not be instrumental in doing any thing that might add to her distress. Every body appeared to be deeply affected at one in the bloom of youth, and in all other respects perfectly vigorous and healthy, being in such a situation. We had a horse die a few weeks before this occurrence. It was feared at the time that the horse was mad, and this horse was in the habit of licking us with his tongue whenever any of us went into the stable. At the first alarm, my mother went out of the house, crying. I was alarmed lest something should happen to her, and followed after, and found her crying at a neighbor's house. Dr. Rawson was the first medical man who came. Several other doctors afterward came, and they all said it was Hydrophobia. Doctor Baldwin first stated that he had seen people act thus in hysterics; but when he heard her bark and growl like a dog, he did not know what to do, and appeared afraid to go near her.

He said he wished he had some of his medical friends to witness it, and remarked he had heard of persons barking and growling when suffering from Hydrophobia, but had never believed it until now. Mr. Jennison was first applied to on Tuesday. A lady, a friend to our family, who had read in the Sunday Morning News an account of a person being cured of Hydrophobia by the East India Medicine, or Spiritus Vitæ, advised us to get some. Doctor Baldwin at first objected to it, but afterwards said that we might apply it if we thought proper, for if it did no good it could do no harm. It was first rubbed on the throat and the part we had discovered to have been bitten by the pup. We had not the dog (alluded to as Clouse's) in our possession more than a fortnight before it ran away. This was in the early part of April last. After the first attack, Ann could not bear to hear of a dog being mentioned, and the name of water threw her into the most violent spasms and convulsions. She complained a little of illness before Saturday night, but nothing of consequence.

I have once or twice found her standing alone in the dark by the side of the horse, which has since died of convulsions, and at the time thought strange of it, but it afterwards escaped my mind. We now thought that she had some presentiment of the fate that awaited her, and had endeavored as long as possible to conceal it from us.

We have discovered that she had a spasmodic attack, accompanied by frothing at the mouth, and that she concealed it by burying or covering up the froth. Since her approach to convalescence, she has admitted having concealed from us slight attacks which she has had, warning her of her awful fate. It is now recollected that on Sunday, when asked to go and call the cows up for milking, she objected to go near the pond, and requested father to do so, which he did. It was unusual in her to make such a request.

Mr. Dickers, the father, examined.—When I first heard the noise in the room that my daughter

Roxey has spoken of, I tried to get in, but the door was fastened, and poor Ann cried out that I could not come in until I got a rope to fasten her. I felt so alarmed that I did not know what to do, and in my agitation I could not dress myself, but ran out, I don't know how, to obtain assistance. I woke up several men in the neighborhood, and then got as soft a rope as I could, and when I returned I found several people there. Not one of them would for a long time venture to come near her, in consequence of her crying out she would hurt us. Her spasms, and foaming and frothing at the mouth were frightful. It was as much as three powerful men could do to get her on the bed. All the time that this was doing she bit, tore, foamed at the mouth, and barked dreadfully, exactly like a dog. Doctor Rawson was the first physician who came; he evinced much fear and apprehension. Other doctors afterwards came, and at first they would not come within six or eight feet of her. All this time she did not speak and was laid on her face; we could not get her on her back. At first Dr. Rawson thought it was hysterics, but when he heard her barking, he began to express his fears that it was hydrophobia. The men who were there said there was conviction enough as to that, and means were taken to bleed her; about a pint of blood was taken from her. Dr. Lindsey next came, and tested the disease by calling for water; water was procured, but she did not see it, she only heard it being poured into the glass, and the spasms produced by it were dreadful in the extreme, continuous, and truly frightful. All the spasms were not attended with barking, but the most were. The barking continued until next day. Neither the powders that were given by Dr. Rawson nor the medicines that were given by Drs. Baldwin and Lindsey, and others, appeared to be of any avail. They could not be used, in consequence of her teeth being so firmly closed by convulsive efforts as to render all attempts to administer them useless. Dr. Baldwin, when he heard Ann bark, exclaimed that he wished he had more physicians whom he knew, to see her. Dr. McNevin and son came up on Monday night. She had not many spasms when they were there. He administered a powder, which she did not swallow, but foamed it up. She has since stated that she does not know of swallowing any thing. While several doctors were there she repeatedly begged of them to cut her throat; she did so imploringly by signs, pointing first to her throat, and then to her arm which had been bled. Dr. Lindsey bled her the second time. The most of them, with the exception of Dr. McNevin and son, wished to bleed her at other times.

The powder attempted to be administered by Dr. McNevin was called the South American powder. Morphine was also attempted to be administered, but she did not swallow any of either. The East India Medicine or Spiritus Vitæ was first applied on Tuesday morning, with the consent of Doctors Baldwin and Lindsey. It was procured at Dr. Hart's, (the agent for Mr. Jennison,) corner of Chambers street and Broadway. Her throat was bathed with it: then a tobacco poultice was ordered to be applied by the physicians to her throat and bowels. Mr. Jennison then came, removed the poultices, and applied the East India Medicine freely to her hands, throat,

head, feet, and the joints of her limbs, by the permission of Dr. McNevin, to whom the operation and properties had been explained. Dr. McNevin, from the representations, consented to its application, satisfied that nothing else could be done for her. It was repeated every half hour until about 12 o'clock, when she appeared to recover, and soon called for drink, and not only slept a little, but conversed some. Prior to this all the doctors had given her up, and we all concluded that that night would be her last. We had applied the East India Medicine twice before Mr. Jennison came;—it had not been used more than two to three hours and a half after the first thorough application was made, before she called for a drink, which she had not done for several days, and seemed considerably relieved. She asked for buttermilk: it was given her—at first a spoonful at a time. She said she could drink a pail full. I gave her the pitcher—she drank the contents, holding nearly a quart. It was about two o'clock when Mr. Jennison left—she was then asleep. About daylight she had a slight return of the spasms, with delirium, which was immediately subdued on the first application of the East India Medicine.

In her delirium she chirruped for dogs—coaxing them, and saying “look at them! see their teeth and eyes how they shine!”—and when asked what she wanted of them, she said, “to bite them.” Immediately on the application of the specific, she became rational, and afterwards slept soundly. I know she had been frequently warned, when playing with dogs, and only three days before her sickness, a pup bit her on the nose.

The morning after, while sitting at breakfast, she complained of having a sore under the tongue. I then alluded to the bite, and asked her if she had put salt upon it, and she said she had. I did not think at this time the sore could possibly have proceeded from the wound. She soon after complained to her mother of a sleepy sensation, which, however, was only attributed to natural causes.

George Duroche, 121 Worcester-street, a brother-in-law of the young lady, being examined, corroborated all the material allegations of the foregoing witnesses, and added as follows: The first medicine attempted to be administered was a powder by Dr. Lindsey. I observed that Dr. Lindsey and the other doctors manifested symptoms of fear. When the doctor came, she was lying with her face on the pillow, frothing at her mouth. Dr. Lindsey wanted us to turn her, and with much difficulty we did, she holding on with the utmost tenacity to the pillows and bed-clothes. In giving her the powders, it was necessary to gag her mouth. She did not then bark. The first barking I heard was on Monday. She not only barked, but howled and growled like a dog. Dr. Baldwin was present when she barked, and he then remarked he had often been told such symptoms attended cases of Hydrophobia, but that he never believed until now that human beings, when so afflicted, could so closely imitate a dog. He observed, he wished some of his medical friends were there to hear it. If any one had entered the door, not knowing that a human being was in the room, they would have believed the barking was that of a dog. She made several attempts to bite John, who was assisting to give her medi-

cine. I do not think all the medicine she took amounted to a tea-spoonful. She swallowed more vinegar than any thing else. When she first recovered her senses, and became able to speak, she spoke of Mr. Jennison as the person who had alone cured her. A whole carriage load of doctors came to see her on Monday night—but they were not all permitted to see her. She has from the first objected to see strangers—their presence having thrown her into spasms. Her first remark was in reference to Mr. Jennison—that he was the doctor who had relieved her from her agony; and she subsequently said that not only had she not taken any of the other doctors' medicine, but that she would not do so: for the bathing of the East India Medicine was the only thing that had done her any good.

John R. Driver, Twenty-fourth street, between 9th and 10th avenue, being duly affirmed, says that he has heard the foregoing statements read, and that they are true in all their material points, and adds, that her symptoms were as follows: When the spasms first began to come on, her eyes became fixed—the spasms would draw back her head, and then throw it forward, on her chest—a general tremor would seize her whole frame; when that subsided, she would gnash her teeth, foam at the mouth, bark and growl like a dog for several minutes, when it would subside for a short time. After the East India Medicine was first applied thoroughly, she has had but one slight spasm since, which is about one week.

ROXCELLEENAH DICKERS,
HENRY DICKERS,
JOHN R. DRIVER,
RACHEL DICKERS,
GEORGE DUROCHE.

Severally and duly affirmed before me, this third day of November, 1838.

WM. H. BELL,

One of the Assist. Just. of the city of N. York.

Eliza Duroche being affirmed, says that the foregoing statements have been read to her, and that she is cognizant of the most material parts therein mentioned, and that the same are true.

ELIZA DUROCHE.

Affirmed before me, this third day of November, 1838.

WM. H. BELL, one of the Assist. Just.
of the city and county of N. York.

P. S. Since the affidavits have been sworn to, and her recovery, the wound occasioned by the bite of the dog has been discovered in a state of inflammation, attended with pain.

The following letters have been received by Mr. Jennison from Doctors W. F. Platt and Jas. Wilson. Letters from several other physicians, with other testimony, will be published hereafter:

NEW YORK, Nov. 9th, 1838.

Sir—The case of Miss Ann Dickers, whom I visited at your request yesterday, presents to view one of much importance to the community generally. From the symptoms, as given in detail by the family and others, we can only arrive at the conclusion, that this was a genuine case of Hydrophobia.

The great relief experienced by the patient soon

after your remedy had been applied, affords the strongest evidence of its curative properties.—There is, therefore, every reason to believe that the *Spiritus Vite* can be presented to the public as a safe and certain antidote to that most distressing complaint.

Respectfully yours, &c.,

WM. F. PLATT.

G. JENNISON, Esq.

Mr. GEORGE JENNISON—Sir—The statement of the Dickers', as given by themselves to me, and that of other respectable persons, in relation to the sickness of Miss Dickers, describes the symptoms of canine madness as it usually occurs, and as I have witnessed it in two adult male cases, and one adult female. Children suffer less by this disease, but in them it is sooner developed, and more rapidly fatal than in adults.

I am not acquainted with the existence of any antidote for the poison of rabid animals, but from the evidence of success of your application, in the case of Miss Dickers, I should recommend your remedy, in preference to any other, in Hydrophobia, and in many other spasmodic diseases.

JAMES WILSON, M. D.

Carlton House, N. Y., Nov. 10, 1838.

MARSH MUD.

Every intelligent farmer probably knows, that this substance forms an excellent manure; although I apprehend it is employed far less than its value demands. An intelligent farmer in Maryland, states, that he "deems it more valuable than barnyard manure;" and that "it never failed in any application he made of it." He also prefers it to marl, because "it is more accessible, its effects are quicker, and much more can be done in the way of improvement for the same money." At the same time he confesses, that the permanent advantages of marl are much greater; and thinks that marl and marsh mud will both be improved by combination. This last remark appears still more important, when we ascertain what it is that gives an agricultural value to this substance. The fact is, it sometimes contains a large quantity of geine, and sometimes but little, while the quantity of the salts of lime, soda, and magnesia, is rather large; so that sometimes a mixture of marl will be of service, and sometimes not.—*N. E. Farmer.*

Sugar Beets—Mr. Chandler—I saw in your paper a few days ago, a notice from some gentleman in Bucks county, saying that a friend of his had cultivated a sugar beet weighing thirteen pounds.

Mr. Townsend Sites of Beesley's Point, Cape May, has raised and gathered from one quarter of an acre of ground, 250 bushels of Sugar Beets, allowing 60 pounds to the bushel. Numbers of them weigh 14 pounds each, and the largest 16 pounds. Tell Bucks county before she plumes herself again, to make another trial, and so will

U. S. Gaz.

CAPE MAY.

Sale of fine Stock—Mr. John H. Clopton of this vicinity, recently sold out his stock of Jacks, Jennets, blooded Cattle, &c. at auction, and we are pleased to learn realized fine prices. His dis-

tinguished Jack *Trumpeter* was bought by Messrs Wilford Gowen and Ira Kneeland of Davidson, at \$3000, Jennet *Rachael* by David Williams, esq. of Nashville, at \$980; Black Jennet and suckling by same at \$705. An imported Durham cow (Eliza) brought \$700, and was purchased by Joseph W. Clay, esq. of Bel-air; calf John Bull, out of Eliza, one year old, \$625, bought by H. P. Bostick, esq. of Williamson.—*Nashville Whig.*

We have lately had several applications for *Morus Multicaulis* trees, but regret our inability to furnish them. We planted a few thousand cuttings last spring, but owing first to the coldness, and then to the dryness of the season, but chiefly to neglect, they succeeded badly. And although a few hundred in our garden, which were properly attended to, succeeded admirably, we have not enough for our own use. We see in the *Farmer and Gardener*, of Baltimore, two advertisements offering the trees for sale, one by J. B. Spencer, Centerville, Queen Ann's county, Md. the other by S. C. Cleveland, No. 5 Bank street, Philadelphia. The supply of trees comes so far short of the demand this season, that the price is most extravagant. Raising the trees would be a profitable business at one-twentieth part of the present prices; they must of course, soon be down to a reasonable price. On land rich enough to produce 20 bushels of corn to the acre, they may be planted one foot apart, in rows three feet wide, which will be more than 20,000 to the acre, and then they will branch considerably, and attain an average height of at least five feet the first season, while they need less cultivation than corn—Each bud on these trees, if properly planted and attended to, the next season will produce a tree.

Cheraw [S. C.] Gaz.

Salaries of the Governors—The salary of the Governors of the different states is as follows:

The Governor of Louisiana receives	\$ 7,500
New-York and Pennsylvania,	4,000
Massachusetts	3,666
South Carolina,	3,500
Virginia,	3,333
Georgia,	2,666
Maryland,	4,000
Mississippi and Kentucky, each	2,500
New Jersey, North Carolina, Alabama and Tennessee, each,	2,000
Maine and Missouri, each	1,500
Delaware,	1,333
Ohio,	1,200
Connecticut,	1,100
New Hampshire,	1,000
Indiana and Illinois, each	1,000
Vermont,	750
Rhode Island,	400

SILK AGENCY,

Corner of E. and 7th streets, Washington City, D. C.

The subscriber having commenced an Agency for the purchase and sale of SILK MULBERRY TREES, and all articles connected with the growing of Silk, offers for sale the following varieties of Mulberry Trees at Baltimore prices, viz. *Multicaulis*, *Alpine*, *Broussa*, *White Italian* and *Canton*; also *Mammoth White Silk Worm's Eggs*, warranted to be of superior quality. All the recent publications on silk growing for sale, and subscriptions received for the various periodicals devoted to that subject.

no 20

J. F. CALLAN.

FOR SALE,

A valuable FARM of prime soil, on the Western Run in Baltimore county, about two miles north west of the 14th mile stone of the Baltimore and York turnpike road, and at the same distance from the depot of the Baltimore and Susquehanna rail road, at Cockey's tavern, in a rich, highly cultivated and healthy tract of country.

This farm contains from 260 to 270 acres, having a full proportion in wood, much of which is building timber, peculiarly valuable in that neighborhood; is in the best state of cultivation; a considerable part in productive timothy meadow, and the residue of the arable land, not in grain, is well set in clover, the whole under good fencing, laid off into convenient fields, each of which is well watered. The farm has a large quarry of excellent building stone. There are on the premises an apple orchard of select fruit trees, which seldom fail to bear abundantly; a valuable mill seat on the Western Run, with a race already dug. There is no location in the country more favorable for a grist mill, having the advantage of a rich and thickly settled neighborhood, and a good public road leading thence to the turnpike road. Buildings substantial and convenient, being a STONE DWELLING, and kitchen of two stories; a large stone Switzer barn, with cedar roof and extensive stabling below; large hay house and stable for cattle; stone milk house near the dwelling, with a spring of fine never failing water, with other out-houses. On the country road near the mill-seat a good house and shop for a mechanic, under rent to a good tenant. It is well known the lands on the Western Run are in every respect equal, if not superior to any in the county. Adjoining or near are the lands of Col. N. Bosley, Daniel Bosley, Thos. Matthews and others. The water power, with about 20 acres of land, is so situated that they may be detached and sold separately, without injury to the rest of the farm for agricultural purposes. Terms of sale will be liberal. Apply to

NATHANIEL CHILDS,

on the premises, or to

WILLIAM J. WARD,

oc 23 tf

Fayette, near Calvert st. Baltimore.

AGRICULTURAL IMPLEMENTS AND SEED SORE.

THE SUBSCRIBER informs the public that he keeps constantly on hand at his old establishment in Pratt-street, near Hanover, a large assortment of PLOUGHS and Agricultural IMPLEMENTS generally, which are too numerous to name in an advertisement, but invites such of the public who are in want of any articles in his line to call, assuring them that his work shall be as well made, of as good materials, and on as reasonable terms as any in the State. His patent Cylindrical Straw Cutters made on his late improved plan are kept at all times on hand, of various sizes and prices, with wood and iron frames—and he challenges its equal in any part of the world. Having an iron foundry attached to my establishment, all orders for Ploughs and Machine castings can be furnished at short notice and on reasonable terms.

In store—Herds and Orchard GRASS SEEDS, of prime quality; also, Landreth's superior GARDEN SEEDS. He is also agent for Mr. Samuel Reeves' Nursery, near Salem, New Jersey, whose fruit trees he can recommend to the public with confidence. Those wishing Trees from that Nursery this fall should hand in their orders immediately.

J. S. EASTMAN.

FOR SALE,

COLUMBUS, a well bred race horse—his pedigree, which is perfect, will be given. Enquire of no 6 3t EDW. P. ROBERTS, Ed. Farm. & Gard.

GENUINE BARNITZ PIGS.

The subscriber has for sale the following pigs, which are warranted genuine:

2 pair 4 months old, and
1 pair 10 weeks old.

The Barnitz hogs are distinguished for their early maturity and size, attaining upon clover pasture from 250 to 300 lbs. when 12 and 15 months old. The price of the largest size is \$15 a pair; that of the smallest 10 a pair.

Applications by letter to be POST PAID.

EDWARD P. ROBERTS,
Baltimore, Md.

oc 30

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every MONDAY

	PER	FROM	TO
BEANS, white field,.....	bushel.	1 25	
CATTLE, or the hoof,.....	100lbs.	6 50	8 00
CORN, yellow.....	bushel.	81	83
White.....	"	80	81
COTTON, Virginia,.....	pound	9	11
North Carolina,.....	"	9 1/2	11
Upland,.....	"	9 1/2	11
Louisiana—Alabama.....	"	11 1/2	12
FEATHERS,.....	pound.	45	50
FLAXSEED,.....	bushel.	1 12	
FLOUR & MEAL—Best wh. wh't fam.	barrel.	10 00	10 50
Do. do. baker's.....	"		
SuperHow. st. from stores	"	7 82	7 87
" wagon price,	"	7 62	7 75
City Mills, super.....	"		
" extra.....	"	7 75	
Susquehanna,.....	"		
Rye,.....	"	5 50	
Kiln-dried Meal, in hhd.	hhd.	19 00	
do. in bbls.	bbl.	4 00	
GRASS SEEDS, wholes. red Clover,	bushel.		
Kentucky blue.....	"		
Timothy (herds of the north)	"		
Orchard,.....	"	2 00	2 50
Tall meadow Oat,.....	"		3 00
Herds, or red top,.....	"	90	1 00
HAY, in bulk,.....	ton.	12 00	16 00
HEMP, country, dew rotted,.....	pound.	6	7
" water rotted,.....	"	7	
HOGS, on the hoof,.....	100lb.	8 50	9 00
Slaughtered,.....	"		
HOPS—first sort,.....	pound.	9	
second,.....	"	7	
refuse,.....	"	5	
LIME,.....	bushel.	32	33
MUSTARD SEED, Domestic,—; blk.	"	3 50	4 00
OATS,.....	"	37	40
PEAS, red eye,.....	bushel.		1 12
Black eye,.....	"	1 00	1 12
Lady,.....	"		
PLASTER PARIS, in the stone, cargo,	ton.	4 50	
Ground,.....	barrel.	1 50	
PALMA CHRISTA BEAN,.....	bushel.		
RAGS,.....	pound.	3	4
RYE,.....	bushel.	90	93
Susquehanna,.....	"		none
TOBACCO, crop, common,.....	100lbs	4 00	4 50
" brown and red,.....	"	4 00	6 00
" fine red,.....	"	8 00	10 00
" wrappery, suitable	"		
for segars,.....	"	10 00	20 00
" yellow and red,.....	"	8 00	10 00
" good yellow,.....	"	8 00	12 00
" fine yellow,.....	"	12 00	16 00
Seconds, as in quality, ..	"	6 00	
" ground leaf, ..	"	5 00	8 00
Virginia,.....	"	4 50	6 00
Rappahannock,.....	"		
Kentucky,.....	"	5 00	8 00
WHEAT, white,.....	bushel.	1 70	
Red, best.....	"	1 65	1 67
Maryland.....	"	1 60	1 65
WHISKEY, 1st pf. in bbls.....	gallon.	44	45
" in hhd.....	"	43	
" wagon price,.....	bbls		
WAGON FREIGHTS, to Pittsburgh, ..	100 lbs	2 25	
To Wheeling, ..	"	2 50	
WOOL, Prime & Saxon Fleeces, ..	pound.	50 to 55	
Full Merino,.....	"	45 50	
Three fourths Merino,.....	"	40 45	
One half do.....	"	35 40	
Common & one fourth Meri.	"	35 40	
Pulled,.....	"	30 33	
POTATOES, 60 to 70 cts. a bushel.			

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,.....	barrel.		
BACON, hams, new, Balt. cured....	pound.	16	17
Shoulders,..... do.....	"	14 1/2	15
Middlings,..... do.....	"	14 1/2	15
Assorted, country,.....	"	14	15
BUTTER, printed, in lbs. & half lbs.	"	31	37 1/2
Roll,.....	"	25	31 1/2
CIDER,.....	barrel.	1 75	2 00
CALVES, three to six weeks old....	each.	5 00	6 00
Cows, new milch,.....	"	25 00	40 00
Dry,.....	"	12 00	15 00
CORN MEAL, for family use,.....	100lbs.	1 75	
CHOP RYE,.....	"	1 50	1 60
EGGS,.....	dozen.	12 1/2	
FISH, Shad, No. 1, Susquehanna, barrel.		9 75	10 00
No. 2,.....	"	9 50	
Herrings, salted, No. 1,.....	"	5 75	
Mackerel, No. 1, ————No. 2	"	12 50	
No. 3,.....	"		7 25
Cod, salted,.....	cwt.	3 25	3 37 1/2
LARD,.....	pound.	14	15 1/2

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

		VIRGINIA.
U. S. Bank,.....	par	Farmers Bank of Virgi. par
Branch at Baltimore,.....	do	Bank of Virginia,..... do
Other Branches,.....	do	Branch at Fredericksburg, do
MARYLAND.		Petersburg,..... do
Banks in Baltimore,.....	par	Norfolk,..... do
Hagerstown,.....	o	Winchester,..... do
Frederick,.....	do	Lynchburg,..... do
Westminster,.....	do	Danville,..... do
Farmers' Bank of Mary'd, do		Bank of Valley, Winch. par
Do. payable at Easton,.....	do	Branch at Romney, .. par
Salisbury,..... 1 per ct. dis.		Do. Charlestown, par
Cumberland,..... par		Do. Leesburg, .. par
Millington,..... do		Wheeling Banks, .. 2 1/2
DISTRICT.		Ohio Banks, generally 3
Washington,.....		New Jersey Banks gen. 3
Georgetown,.....	Banks, 1/2 p.c.	New York City, .. par
Alexandria,.....		New York State, .. do a 1/2
PENNSYLVANIA.		Massachusetts, .. 1 1/2 a 2
Philadelphia,..... par		Connecticut, .. 1 1/2 a 2
Chambersburg,..... 1/2		New Hampshire, .. 1 1/2 a 2
Gettysburg,..... do		Maine, .. 1 1/2 a 2
Pittsburg,..... 2 1/2		Rhode Island, .. 1 1/2 a 2
York,..... 2		North Carolina, .. 3 a 3 1/2
Other Pennsylvania Bks. 1/2		South Carolina, .. 4 a 5
Delaware [under \$5].... 4		Georgia, .. 5 a 5 1/2
Do. [over 5]..... 1 1/2		New Orleans, .. 7 a 8
Michigan Banks,..... 10		
Canadian do..... 10		

SPLENDID BLOODED STOCK FOR SALE.

The proprietor of Covington farm will dispose of the following fine bulls on reasonable terms, viz.

One bull two and a half years old.

One do. six months old.

of the improved Durham short horn breed; the dam of the first was got by the celebrated bull Bolivar; for size, form and beauty they are not surpassed by any animal in the state.

Three Devon Bulls, one of which is seven years old next spring, and the largest Devon in the State. The Devons are from the stock of the late Wm. Patterson, and of undoubted purity.

Two half Devon bulls.

Two bulls half improved Durham short horn, and half Devon.

One splendid bull, a cross of the Bakewell, Alderney and Devon.

One bull, half Alderney and half Holstein.

These fine animals may be seen at Covington farm, near Petersville, Frederick county, Md. on application to James L. Hawkins, Baltimore, or to

see 11 f FREDERICK EBERT, Manager.

SPRING CLOVER SEED,

Just received and for sale, by R. SINCLAIR, Jr. & CO.

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CHINESE MORUS MULTICAULIS, &c.

At the Linnaean Gardens, Flushing, New York.



50,000 splendid TREES of the genuine Morus Multicaulis are yet remaining for sale at moderate prices according to their size; and also Cuttings of the same. None of the Humbug kind are sold at this establishment. Also 20,000 trees of the splendid Morus Expansa which has very large leaves, greatly loved by the worm, it is very

hardy, and yields silk of the first excellence. A great supply of the Moretta or Alpine Mulberry, the Canton, Dandole, Broussa, Asiatic, Pyramidalis, Rose of Lombardy, Morus Alata, and other varieties.

Also Fruit and Ornamental TREES, Plants and Seeds of every kind, and an immense stock of Bulbous Flower Roots, just arrived from Holland.

Silk Worms Eggs of every kind at the lowest prices, and White Italian, Canton, and Moretti or Alpine Mulry Seeds in any quantity. The Morus Multicaulis Trees raised here have one-third more joints and buds than southern trees, and of course are worth 50 per ct. more for propagation; and the wood becomes as mature and perfect on the high exposed position our Nurseries occupy as at any place in the Union. Also, Fruit and Ornamental Trees, Bulbous Roots, Green House Plants, and Seeds of all kinds, for sale in large or small parcels.

Priced catalogues will be sent to every applicant, and orders per mail will be executed with as much precision and dispatch as if the purchasers were present, and will be packed so as to be sent to the remotest region with safety.

no 20 2m

WM. PRINCE & SONS.

CHINESE MULBERRY TREES.

American Silk Agency, No. 5, Bank street, Philadelphia.

The subscriber having opened a permanent Agency for the purchase and sale of all articles connected with the culture and manufacture of Silk in the United States, offers for sale all the different varieties of MULBERRY TREES, suitable for raising the SILK WORM; viz: Morus Multicaulis Alpines, Brussa Multicaulis Seedlings, Morus Expansa, Multicaulis Cuttings, Improved Italian Trees, &c. Also, Cuttings from Norton's Virginia Seedlings, and Cunningham's Prince Edward GRAPE VINES. These vines produce an abundant crop of fruit, warranted not to rot or mildew and are fine for the table, and capable of yielding the finest wines.

S. C. CLEVELAND, Agent.

Those who may wish to enter into this profitable branch of national industry, will do well to call at the Agency, and see that they are well instructed in the value of the trees they purchase.

N. B. The particular attention of those engaged in the culture and manufacture of American Silk, whether of trees, Eggs, Cocoons, reeled or manufactured, is called to this agency. The Agent will give every attention to Sales, and prompt remittance of proceeds of any article sent to him. Those who may wish to purchase and enter in this valuable branch of home industry, can obtain from the agent every information, and also such articles as they may want without fear of deception.

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DURHAM STOCK FOR SALE.

No. 1. Matilda, 3 years old, a dark mahogany [red or Devon color; she is out of a half Devon cow, by a full bred Durham bull, and now in calf by one. He price is \$60

No. 2. Beauty, a handsome roan, 4 years old, fresh in milk, possesses the fine points of the Durham; she is half Durham, and her price \$75.

No. 10. Snow, a white heifer, with red neck and ears, 2 years old, in calf by a full bred Durham bull—price \$50.

No. 11. Pink, a whitish roan heifer, 2 years old, in calf by a full bred Durham bull—price \$50.

No. 12. Cherry, a half Devon cow, 7 years old, a fine milker, in calf by a full bred Durham bull—price \$60.

The above cattle are offered for sale by the subscriber, at the above reduced prices—terms, cash on delivery.—Applications made by letter to be post paid.

EDWD. P. ROBERTS,

no 5 3t Baltimore, Md.

THE AMERICAN FARMER.

The proprietors of this paper have a few complete sets of this work on hand, which they will dispose of at the reduced price of \$50 a set.

A HALF DURHAM COW FOR SALE.

The subscriber has for sale a beautiful fashionable roan half Durham Cow. She is fresh in milk and only 4 years old. Her price is \$75. Applications, post-paid, to be made to ED. P. ROBERTS.

Who has also for sale several full bred Devons, males and females.

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THE FARMER & GARDENER.

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, E. P. ROBERTS AND SAMUEL SANDS—EDITED BY E. P. ROBERTS.

No. 32.

BALTIMORE, MD. DEC. 4, 1838.

Vol. V.

THIS publication is the successor of the late **AMERICAN FARMER** and is published at the office, at the N. W. corner of Baltimore and North streets, over the Patriot office, at two DOLLARS AND FIFTY CENTS per annum, if paid within one month from the time of subscribing, or \$3 if after that time. All letters to be postpaid.

BALTIMORE: TUESDAY, DEC. 4, 1838.

The Silk Growers' Convention will meet in this city on Tuesday next, 11th inst. in the Saloon of the Law Buildings.

The Silk Growers' Convention.—The Zanesville [Ohio] Gazette, in speaking of the convention to be held in this city on the 11th inst. says—

"It is believed that a body of practical men thus meeting in convention, each prepared to contribute his proportion of experimental knowledge, will be able to lay before their countrymen a fund of most valuable information in the shape of facts and suggestions which will give confidence to the inexperienced and wavering, as well as impart knowledge greatly conducive to success. Persons having specimens of cocoons, raw silk, sewing silks, or articles manufactured from American silk are invited to send or take them to the convention. 'What man has done, man may do,' has been well remarked, and nothing goes so far to convince the incredulous as a sight of the articles produced. We have now in our office two specimens of sewing silk made in this county equal for strength and beauty to the best Italian. We do not pretend to say how far men may profitably engage in the culture of silk, but we do know, *for we have seen it done*, that silk of excellent quality can be made in this county, and by persons who have had little experience, or other information except what has been derived from *Roberts' Silk Manual*, or some kindred work."

We thank the Editor for his kind offer contained in the annexed notice of our *Silk Manual*:

"Mr. Roberts, editor of the Farmer and Gardener, Baltimore, Md. announces in the last number of that valuable periodical that he has been induced by the continued demand for his *Silk Manual*, to revise it preparatory to the issue of a third edition, which will be ready for sale in a few weeks. The increased attention which has been bestowed upon silk culture since Mr. Roberts issued his first edition, has enabled him to greatly improve that useful little work; a work which has aided as much as any other in producing an increased attention to this business. We wish him success, and shall with pleasure, forward any orders we may receive for the *Manual*."

We learn from the *Freedom's Centinel*, published in Centreville, on the Eastern Shore of this

state, that on Friday, the 18th ultimo, the Queen's County Silk Company had their sale in the village. The day was very unfavorable, being rainy, which doubtless prevented many from attending. The Company, however, disposed of \$2200 worth, at very fair prices, and closed the sale, reserving the remainder for disposition next spring. The prices paid at the Company's sale, averaged about \$50 per thousand cuttings.

We are pleased to see it stated in the same paper, that another Silk Company has been formed in Centreville, Queen Anne county, Md. with a capital of \$10,000. The stock was taken in a few minutes after the subscription was opened.

We also learn from the same paper that both of the Queen Ann County's Silk Companies will be represented in the *Silk Growers' Convention*, which is to meet in this city on the 11th of the ensuing month.

The Morus Multicaulis.—We saw, this morning (says the Boston Transcript) a skein of white silk, equal in quality to the best Italian, which was manufactured by a son of Mr. George Bunt, of Manchester, a lad of only 15 years of age, from the silk wound by silk worms that were fed on the leaves of a *morus multicaulis* tree, which the boy planted *last spring*. The skein was one of a dozen manufactured by the boy and the worms from the leaves of the same tree. What renders the circumstance more remarkable, is the fact, that the lad made his own reel and spinning apparatus.

Miss CHARLOTTE MITCHELL, eldest daughter of Major Thomas Mitchell, of Thomas county, Georgia, when married some time since, was dressed entirely in silk of her own manufacture, viz. cap, stockings, gloves, and frock, which was pronounced by all that saw her to equal the best Pongee.

The *Morus Multicaulis* trees raised here have one-third more joints and buds than Southern trees; are worth 50 per cent more for propagation; and the wood becomes as mature and perfect on the high exposed position our Nurseries occupy, as at any place in the Union.

The above paragraph we cut from an advertisement of Messrs. Wm. Prince & Sons, of Flushing, New York, with a view of pointing out what

we consider the invidiousness of its character, and the want of truth in its averment. In saying this, we would not wish to be understood as seeking a controversy, but merely as defending the mulberry growers of the south from what we honestly believe to be an act of injustice and wrong. That the Messrs. Prince can grow *good trees*, we are willing to admit—nay, that they do grow *very good trees*; but it is assuming too much, when they say, that trees raised at their Nursery at Flushing "have one-third more joints and buds than Southern trees, and of course are worth 50 per cent. more for propagation." The logician by attempting to prove too much, often defeats the object in view, and weakens rather than strengthens his argument; and so, we think, the Messrs. Prince have done. Their trees have "one-third more joints and buds," and forsooth, are, therefore, worth 50 per cent. more than Southern trees": now according to our arithmetic, if we admit all that these gentlemen claim for their trees, $33\frac{1}{3}$ per cent. is the sum total of what, by their own showing, they can demand on the score of superiority; but as this superiority rests merely upon opinion unsupported by facts, it must pass for just what it is worth. We have a tree in our eye now, which we raised this season from a *one-bud* cutting, that has 224 *hard-wood* buds on it, and notwithstanding the preference assumed for the trees of Flushing, we think it would puzzle the Messrs. Prince to beat it. We admit that trees raised in the South on the *rich alluvial bottoms* of the Mississippi, would have elongated limbs, and consequently, that there would be a greater distance between the buds on such trees than on those raised in the East, but we firmly believe that in the superiority of their *size*, the former would make up for the closer position of the buds on the latter trees. Every one in the least acquainted with the laws of nature, know, that plants and trees grow much faster in fertile lands than they do on poor soils, and that the necessary consequence of this *rapid growth* is the elongation of their limbs. Hence it is to the *character of the soil*, more than the *location*, that we are to ascribe this effect. This being the case, although we of the South may not be as apt horticulturists as our Eastern neighbors, still we may claim for ourselves the credit of being endowed with suf-

ficient judgment to be able to select suitable grounds whereon to grow our trees, and as too many of the people of the old Southern states, have land, whose virgin excellence have been long since yielded up, it must be conceded that these worn-out fields will suit most excellently well for the purpose of producing *short-jointed* *Morus Multicaulis* trees.

It is quite fair and proper for these gentlemen to praise their own trees; but certainly it is *not very liberal* for them to do it at the expense of the Southern growers, many of whom, doubtless, bought their original stocks from them. But if Southern trees were really so worthless, would the Messrs. Prince be anxious to speculate in them? Certainly not, as they have doubtless too much honor to make money from a worthless commodity.

There is one virtue which belongs to the Southern trees, that does not appear to be the common property of all the trees we have seen—the Southern trees, in consequence of our *long-growing season*, ripen their wood, an object of first importance to those who desire the buds for the purpose of propagation; for no matter how *short a joint* may be, if the wood be not matured, no germination of the bud will take place, as a full and perfect development of the parts is essential to produce that effect.

CALIFORNIA CORN.

We find in the *Poughkeepsie Telegraph*, the following account of a new variety of corn introduced by Gen. James Tallmadge, into the state of New York, and which bears the name of that part of Mexico whence it was brought to this country. To speak of its being raised in California in Mexico, is, however, a very indefinite description of its local habitation, for *California* is the designation of an immense coast of country, stretching from the Cape of St. Lucas N. lat. 22° 52, to N. lat. 42, on the western coast of this continent through a range of nearly twenty degrees of latitude. In the indefinite character of the whereabouts of this stranger-corn, we nevertheless derive consolation; for, as we take it for granted that it is the variety generally raised in that vast district of country, we come to the conclusion, that there are but few of our states where it might not be acclimated—and we arrive at this conclusion, not because of its ripening the past season in this country, as vegetation was thrown forward fully three weeks by the long continued drought, which prevailed in June till the middle of August; but because any production which can adapt itself to

those vicissitudes of climate and temperature to be found in 20 degrees of latitude, will be likely to prove as tractable an occupant to the soil, as though it were a native to the manor born. Again, it appears that the first experiments with this corn, were tried, and succeeded, in the season of 1836, which fact alone, establishes in our mind the possibility of its adaptation to our varied climates, as that season was as remarkable for its backwardness, as the former was for its forwardness. At all events, we should thank our friend *Killey*, of the *Poughkeepsie Telegraph*, to send us a few of the *kernels*, in order that we may test its congeniality to the soil and sun of Maryland—and we would be further obliged to him, if he would be so good as to give the length of, and number of rows on, the ear.

CALIFORNIA CORN.

A year ago this season, there was a good share of boasting in all the public journals on the subject of extraordinary products—such as tall grass, large clover, mammoth squashes, &c. At the time, and to eclipse every body, the gentleman living on the farm of Gen. JAMES TALLMADGE, about six miles south of this village, brought us two stalks of corn raised by him, the tallest of which measured fifteen feet two inches, and had five ears upon it. The other was nearly as high, and had four ears. The seed of this corn had been exhibited the year before at the fair of the American Institute, New-York. It was brought from California, in Mexico, and Gen. TALLMADGE, who is President of the Institute, gave some to his farmer, and the stalks we speak of were the product of that seed. We hung them up in our office, and they hang there still. They have attracted the attention of most persons who have been in the office within the year, and the kernels of the ears have been pretty well distributed through the county. Our present object is to enquire what the product of those kernels has been?

For ourselves, we planted some in our garden, but they have not done any thing of which we can boast, though the yield is good, and the stalks one or two feet higher than our common corn.—But two stalks from the seed raised by Mr. FRIEND BUTTS, of this village, surpass any thing we have ever seen. The tallest one is *seventeen feet high, and has NINE ears upon it*, five of which are good full ears—the others imperfect.—The other stalk has four ears. There was a third stalk which promised to be taller than the others, but it was blown down by the wind. He states that no extra manure was used, and the ground was not rich. If this corn will yield thus in general, and ripen in our climate as it has ripened this year, it is well worth the attention of our agriculturists. We should be glad to hear from others who took some of the kernels, how they have produced.

NEW ORLEANS, Nov. 17.

The Planter's Banner of the 8th states that the planters are actively engaged in sugar making, and the yield of this year is likely to be better in quantity and quality than that of any former season—

It appears also that the sugar crop in the West Indies this year has been most extraordinarily good; in the Island of St. Croix alone, 20,000 hhds. of Sugar were made, and 17,000 casks of rum and molasses. The most flattering prospect for the crop is said to exist; and it is even thought that it will be more abundant than the last.

The present Cotton Crop—By the politeness of a gentleman arrived yesterday from Natchez, we have been put in possession of the Natchez Courier of the 15th inst. which contains the following unfavorable view of the present crop in that section. As our informant is well conversant with these matters, we fear there is too much truth in the subjoined:—*U. S. Gaz.*

COTTON—Our latest accounts represent the present crop still more unfavorably than was before anticipated. All throughout the cotton growing States, the prospects of the planter have been dampened, and every change in the weather hitherto has rendered a very great deficiency in the amount of our staple product still more certain—The past week has been unfavorable for picking; the present weather is unfavorable and promises to continue for some time; in some cases the same number of hands on the same plantation, picked, last week, barely the half of what they did the same week of last year. We are safe in publishing that the present cotton crop has not yet been represented so far deficient, as the most experienced planters now think it will turn out.

From the Genesee Farmer.

THE PHILOSOPHY OF VEGETATION.

Perhaps there are few subjects of so much interest to the farmer as a proper understanding of the causes and agents of vegetable nutrition. The economical application of manures, the propriety of their use, the value of a system of rotation in crops—in short, the whole philosophy and practice of farming—may be said to be depending on this point. Is there but one substance in nature that constitutes the proper food of plants? or are they endowed with omnivorous powers, and capable of finding food in all things presented to them? If there is but one kind of food, what is that one?—and if there are many, what is their state when appropriated by the plants? These are a few of the subjects that enter into a consideration of the food of plants; and the opinions of writers on vegetable philosophy have been as various and conflicting as the substances which chemical analysis has detected in plants have been numerous.

Some have maintained that the actual nourishment was derived from the air; some that water alone constituted the food of plants; others have asserted that the growth was owing to a single substance, and that earths which are present in plants, as well as most of the salts, are to be considered as merely accidental, not being necessary to the formation or growth of the vegetable: the only substance which all are agreed in considering absolutely indispensable, since it is a large and apparently essential part of every plant, is carbon. If the plant derives its support from the air, then the carbonic gas which exists in it must be the source of supply: if taken into circulation by the roots, then the carbon must exist in some soluble form, since the greatest chemical skill has never

been able to induce a plant to take up the minutest portion of insoluble carbon, or detect its presence as an operation of nature.

Amidst these conflicting sentiments, adverse and contradictory as they may at first seem, we think that the opinions of men of science are verging to an agreement on one or two of the most essential points; and what we consider as of quite as much consequence, these opinions very nearly coincide with the actual experience of the farmer, and give a strong support to the modern theories and practice of agriculture.

We believe that Klaproth was the first to discover and announce to the world the existence of a peculiar substance, which he considered of importance to vegetable organization from its analysis, and which, from his first finding it in the bark of the elm, he denominated *ulmin*. Braconnet continued the investigation commenced by Klaproth, and found there were few substances of vegetable origin in which ulmin did not exist, tracing it in considerable quantities in sawdust, starch, sugar, seeds, and indeed in nearly all plants it was present. Berzelius, the great Swedish chemist, embraced it in his researches, and extending them to the soil, found that it existed in the earth in abundance, as well as in the bark and ligneous substance of trees. From its presence in the earth, and the probability that it was from thence that plants derived it, Berzelius distinguished it by the name of *geine*, a word derived from the Greek word signifying the earth. Sprengel and Bouilly have discovered that it is a leading and efficient principle in vegetable and animal manures, and hence they have denominated it *humire*, a name by which it has been most generally known, though scientific men are appearing to incline to return to the nomenclature of Berzelius. The justly celebrated chemist and observer, Raspail, in his late work on Organic Chemistry, translated by Dr. Henderson, denies the existence of *geine* or *humire* as a proximate principle in soils, and says, "it will be easy to see that all these phenomena, (described by Berzelius, Sprengel and others,) apparently so varied, which have given room for the discovery of so many substances analogous to ulmin in their nature, are essentially nothing but a development of carbon." The name, however, we consider of mere secondary importance, and whether it is called *ulmin*, or *humire*, or *geine*, or *carbon*, it cannot effect the results which seem to flow from the substance and render it one of the most important agents in vegetable nutrition, if not the only one yet known. *Geine*, says Prof. Hitchcock, in his late admirable Report on the Economical Geology of Massachusetts, "when wet, is a gelatinous mass, which on drying, becomes of a deep brown or almost black color, without taste or smell, and almost insoluble in water; and, therefore, in this state, incapable of being absorbed by the roots of plants. Yet after the action of alkalis upon it, it assumes the character of an acid, and unites with ammonia, potassa, lime, alumina, &c., and forms a class of bodies called *geates*, most of which are soluble in water, and therefore capable of being taken up by the plants; and it is the state of *geates* that this substance, for the most part, exists in soils."

Silica, alumina, lime, magnesia, oxide of iron, potash, soda, and sulphuric and phosphoric acids,

may be considered the inorganic principles of vegetables, and analysis detects their presence in the most of them; hence they will be found the constituents of all soils, for the most part existing as salts—for instance, carbonate of lime, sulphate of lime, muriate of lime, phosphate of lime, &c. Neither the earths nor the salts can be considered the proper food of plants, as both these may be present, and yet a weak or imperfect vegetation, or none at all, be the result. But if the combination of these salts with humus or *geine* has taken place, then, in connexion with the earths, vegetation will be vigorous, and the proper functions of plants fully developed. In the language of Dr. Dana, it would seem then "that the earths are the plates, the salts the seasoning, the *geine* the food of plants."

The 'Soluble Vegetable Extract,' of Davy and Chaptal, produced from carbonaceous mould, is the soluble *geine* of Berzelius, and the insoluble matter of the mold spoken of by Chaptal would seem to be the insoluble *geine* or humus of Berzelius and Sprengel. *Geine* is, therefore, the decomposed organic matter in the soil. When the result of recent decomposition, it is abundantly soluble in water; the action of the atmosphere converts this soluble matter into solid humus or *geine*, 'still partially soluble in water, and wholly soluble in alkali.' Soluble *geine*, and in this state only does it become the food of plants, acts neither as acid nor alkali. It is converted into a substance having acid properties by the action of alkali, and in this state combines with earths, alkalies and oxides, forming neutral salts, soluble in water, such as magnesia, lime, &c., and thus matter insoluble of itself is prepared for the food and nutrition of plants. It seems to be satisfactorily established by late chemical researches, that this substance forms the nourishing basis of all soils, and that they are fertile or infertile exactly in proportion to the soluble *geine* they contain, or the application of materials capable of converting the insoluble into that which is soluble.

If there are any facts certain in agriculture, it is that a soil composed chiefly of one of the earths, either sand, lime, or clay; or one that contains an excess of salts, as pure manures, are always barren. Plants may indeed exist to a limited extent, but they will be weak and without fruit. To these earths add *geine*, and a perfect healthy vegetation will be the result. The great essentials of vegetation then are the earths, salts, and *geine*, and their degree of fertility will mainly depend on the proportion with which the last is mixed with the first.

Every discovery in experimental philosophy—every advance in vegetable chemistry, seems to render more clear the great truth, that nature's works, though apparently complex, are carried on in the simplest manner, and with the fewest possible agents. The slight shades of difference found to exist in the constituents of most dissimilar substances, such as starch, lignin, sugar, and some of the acids, prove that slight causes produce powerful modifications of matter, and render it probable that the original kinds of matter are less numerous than have been usually supposed. All investigations point to an agency that pervades all the forms of matter, and by an arrangement of atoms consequent on vitality produces all the varied forms of vegetable and animal

nature. This agent, under the name of caloric galvanism, or electro magnetism, is constantly at work modifying, changing, combining, decomposing, and arranging. To it we owe aggregation and cohesion—to its subtle and diffusive energy, all growth and circulation—and may it not be considered as certain that the earths and salts are a magnificent voltaic battery, ever ready for action when moistened with water, and thus reviving the dormant vitality of the seeds submitted to its influence. But though this vitality may be revived, and the slumbering energy of this germ of the future vegetable be restored to activity, it is clear that the circulation will produce little or no effects in inducing growth, unless matter suitable for absorption and after-deposition, is provided for the newly awakened energies and action. This is furnished by *geine*, and is presented in a state the most suitable for the circulating juices of the plant. Taken up by the roots, or absorbed from the air, it is converted into lignin or woody substance by deposition and aëration, and thus becomes a new plant, prepared to run its course of growth, maturity and decay.

Taking this simple, and we think philosophical view of the subject, the reasons of many farming processes, hitherto but little understood, are made more plain; and various improvements suggested and made practicable. If a soil on analysis contains an undue proportion of any one of the earths, the evil can be remedied by combining them in the proper manner, by adding what is deficient until the balance is restored. But the fact, that the earths themselves, uncombined with salts or *geine*, are never fertile, and that all the combinations of which they are capable, can never be made to support vegetation, should not be lost sight of. Some soils, from the proportion of the earths found in them, are more friable and easier to work than others, and some combinations are proved to be more suitable for the union with salts necessary to the excitement of voltaic or galvanic agency and the consequent vitality and circulation of plants; but alone, no possible modification or combination can make what is called a fertile soil. Were we to name for comparison the agents and the several parts they perform in the process of vegetation, we would call the *earths* the plates of the galvanic battery, inert while dry, or not subjected to exciting causes; the salts by their solubility furnishing the acids, such as carbonic, sulphuric, phosphoric, necessary to rouse the battery action; and when this is done, humus or *geine* offers the only matter that can be taken into circulation and constitute (properly speaking) the food of plants.

According to the modern investigations of science, every particle of matter is pervaded by this universal agent, and requires only the aid of moisture to its greater or less development, the intervention of the fluid serving as a conducting power between the several particles. Pure water is the weakest exciting power yet known, but at the same time the most durable. This is beautifully exemplified in the experiments of Mr. Crosse, who uses only water for the exciting power of his batteries when he requires their uninterrupted action for weeks or months, the slow continued excitement being more favorable to the development of animal life, or metallic or mineral crystallization, than one more powerful, but of shorter

duration. This action of water shows why water alone, applied to the earths and through them to vegetables, has so feeble and tedious an operation on their development. On the contrary, if the acids are supplied, and this is done in a multitude of ways, the action becomes at once vigorous, and connected with a proper supply of food, vegetation will be rapid and abundant.

This theory of vegetable nutrition explains, in our opinion, far more satisfactorily than any other, the mode in which manures, vegetable, animal and mineral, produce their effects on vegetation, and stimulate its growth. According to Chaptal, the different substances afforded by animals, and useful as manure, including all their secretion, are, "gelatine, fibrine, mucus, fat, albumen, urea, uric and phosphoric acids, and some of the muriates or salts." Here, it will be seen at a glance, are a multitude of exciting and nutritive causes mingled, and when combined, as animal manures usually are, with vegetables decomposed, the available geine is considerably increased. The liquid manures found so powerful in Flanders, and the use of which is such a marked feature of the excellent Flemish husbandry, are, it is well known, mostly composed of the urine of animals. The analysis of urine by Mr. Brandt discloses the cause of this efficiency.

Water,	65
Phosphate of lime,	5
Muriate of Potash and ammonia,	15
Sulphate of Potash,	6
Carbonate of Potash and ammonia,	4
Urea,	5

100

A more active combination could scarcely have been devised than this analysis shows such manures to be; and though Fourcroy and Berzelius slightly vary the constituents, their analysis does not materially alter or impair its efficiency. Of the above animal ingredients, we will select but one to illustrate our theory, as it is one respecting the efficiency of which as a manure there can be no doubt, and which is daily coming into more general use—we allude to phosphate of lime or bone dust.

(To be Continued.)

From the Farmers' Register. SCRAPS OF INFORMATION WITH REGARD TO THE CULTURE OF THE CHINESE MULBERRY.

In the present unparalleled and general excitement in regard to the speculations in purchasing, and intended cultures of the *morus multicaulis*, no apology need be offered to our readers for giving to that, and to kindred subjects, so much space in his publication. Indeed, whether viewed as a valuable future improvement in the agriculture and industry of this country, or as a subject of national mania, the one is of intense interest to almost all who read agricultural publications, and to even most persons who read nothing. Almost every one of our subscribers, stimulated by some one or other motive, will desire to cultivate at least a few plants; and all are but slightly informed on the subject. Therefore, in adding to the valuable general directions for the culture, given by G. B. Smith, Esq., in the last No. we shall add here some interesting extracts from several private let-

ters from T. S. Pleasants, an extensive cultivator of some experience, and whose general intelligence, and correctness of observation, deserve the fullest confidence. These were designed only for our own perusal and use; but considering the suggestions as interesting, and likely to be useful to many others, we have asked and obtained permission to share the benefit with our readers.

To these extracts will be added other scraps of information received from various sources, and principally from the Rev. Sidney Weller, of Halifax county, N. C.

It is gratifying that the favours of fortune, in this sudden surprising mulberry madness, have fallen in some cases upon most worthy receivers; and there are none in whose successful and profitable cultivation we are more gratified than in the cases of the individuals named above. In general these unexpected visitations of good fortune have fallen upon a class of cultivators, who usually work more for the public benefit than their own, and whose improvements, or schemes, subject them always to ridicule, and often to loss. These are the book farmers and experiment-makers—and especially the regular and devoted readers of the *Farmers' Register*, or other agricultural periodicals. To this last fact we desire particularly to call attention; and would be much benefitted if it could be presented fully to the view of all who have made nothing from this golden harvest, simply because they had read nothing concerning the cultivation which has produced it.

We shall take the liberty of speaking more fully of Mr. Weller's case, because it is one of peculiar interest. He settled himself on a piece of miserable poor land, and with very little prospect, as his neighbours thought, to make a bear subsistence from its products. He has devoted himself principally to vine and multicaulis culture. Some notices of his useful services to agriculture, in the former department, have been heretofore given in this publication. Of the latter, the principal circumstances are as follows. Five or six years ago, being then, and long before, a regular reader of the *American Farmer*, he was induced by its recommendations (all of which we owe to its former Editor, Gideon B. Smith.) to begin the cultivation of the multicaulis. He bought of J. J. Hitchcock, of Baltimore, a plant of about a foot in height, for which he paid a dollar, and 25 cents more for getting it to his residence. From this small beginning, all his stock, and many other, now large stocks, bought from him, have grown. Mr. Weller's sale of plants, before this season of speculation and high prices had commenced, amounted to about \$2000, and, this fall to \$8000 more, though made at 6 cents the foot, and before the rise to half the present current prices; besides reserving enough stock to double or treble his crop next year.

Let it not be supposed from these or any other statements of enormous profits from raising multicaulis plants, that we design to have it inferred as our opinion, that we expect them to continue. The greater part of the present prices of multicaulis is undoubtedly a bubble, blown up by speculation; and that part must burst sooner or later, (when we cannot predict;) but the intrinsic value of the plant will remain; and if silk culture should be really undertaken by only one in every hundred, and the demand thereby created should main-

tain, for two seasons, the plants and buds to one-eighth (or perhaps one-sixteenth) part of their present exorbitant prices, the cultivation will still be highly profitable to all who plant even at the present high prices. If there should be no demand of purchasers, and no design in the cultivator to raise silk worms, then of course he will lose his whole outlay. Of these, or of better chances, every adventurer must judge for himself.

We proceed to give extracts from our friend Pleasants' letters. He will not confine his efforts to merely raising mulberry plants for sale, but will feed silk worms the next season, on a considerable scale. For this purpose, he has acquired possession of the Bellona Arsenal, in Chesterfield, which will be converted from its late warlike name and purpose, to a laboratory for the peaceful and useful labour of silk culture, under the direction of its present worthy occupant.

On the subject of one-bud cuttings of multicaulis I can give thee my experience this year, which perhaps may be of some value. It is probably known to thee, that with scarcely any exceptions, there was a great failure in getting cuttings to start last spring. John Carter is the only cultivator I know who has succeeded well. Next to him I place myself—but at a considerable distance in the rear. To the north, not more than one in 15 or 20 grew. The failure was owing to a peculiar season, for I never saw cuttings start better than mine did. An excessive drought, at the time the plants began to root, dried them up. In preparing my cuttings, out of some of the strongest and best wood, I cut 10,000 or 15,000 with one bud. The one-bud cuttings I planted to themselves in the same sort of ground with the others; and they were all subsequently tried alike. Taking the piece at large, they stand as well as the best spot of two-bud cuttings, and much better than the greater part of them. They came up with great regularity, and have grown off very evenly.

"If the season is propitious, there is no reason why a cutting with one bud should not grow as well as one with two buds. A large one may be stuck deeper in the ground, and in the drought, it may be longer under the influence of moisture. But with early planting, I have no hesitation in relying upon any good one bud cutting; and early planting, by the way, is more or less important to the success of every mode. I have never taken up my multicaulis plants so early in the spring, but what I found the buds started, and the little rootlets in the act of being thrown out. The growth must therefore be checked by exposure to the air, and transplanting. From my observation, the conditions which I would recommend, (and which I rely on so fully that I intend to practice them,) in order to insure success to one-buds, are as follows: Preserve the plants during winter in a cool place, not exposed to the sun. Let the ground be prepared, so that the planting may be commenced as early as the season will permit; if in February the better—at any rate, early in March. The soil should not be so light or sandy as to become thirsty very soon. Let the cuttings be prepared by separating midway between the joints, and stick them deep enough for the bud to be covered from an inch to an inch and a half, according to the texture of the soil. The bottom of the slip will then be 2 1-2 inches beneath the surface—a depth

to which the ground seldom becomes entirely dry in the early part of the spring—and if there be any choice of ground in the lot, select for single buds that part which lies the lowest, as being likely to retain moisture the longest. With these precautions, and above all, *early* planting, no failure can, in my opinion, ensue; but I would advise thee to consult other cultivators on the subject. By a strong cutting, I mean one taken from the larger part of the main stem of a vigorous plant, and those near the base of thrifty lateral branches. Some days ago, I removed the earth from a number of my single-bud plants, for the purpose of examining them carefully. I found some smaller than I intended to plant; but the trees were as large as those from the largest cuttings. * * *

"My plants will this year yield *per cutting* about 40 buds, on the average—perhaps more, and the most of them grow on a thin, shallow soil, that never was manured." * * *

"It is the opinion of many men of judgment, with whom I have conversed and corresponded, that the present prices will be nearly or quite sustained another year. The stock of mulberries is not so large as one might suppose. There are very few in New England. A friend in Baltimore informs me that G. B. Smith estimates the number in the United States as two and a half millions. R. Sinclair (perhaps in conjunction with Smith,) states the same number; and a friend of mine, who has taken great pains to inform himself, has arrived at precisely the same conclusion. I cannot help thinking there are more; but my information on the subject is not extensive. In regard to the demand, I may say that in addition to that indicated by the present high prices, Judge Comstock, editor of the *Silk Culturist*, told me he did not think there were more in the United States than would supply the state of Connecticut, at fair prices, if they were all sent there. And a gentleman of Burlington informed me that there were not more than enough in New Jersey to supply the present demand in the county of Burlington in the same manner.

"I intended to have said a word about sprouting cuttings in a hot bed, as recommended by G. B. Smith. I have only tried it once, and then on a small scale; but I did not succeed very well. The objection, is, that the plants become chilled and stunted by removal from such comfortable quarters to be exposed to the inclemencies of the month of May. But in any event, great skill and attention are requisite in the management of a hot bed.

"It may be very familiar to thee, but it will do no harm to add, that the most convenient instrument in preparing the cuttings, is a pair of pruning accisors—such as are used by vine dressers." * * *

[My experience teaches me that this objection rests against plants grown in hotbeds with glasses. We, however, consider that glasses are wholly unnecessary, if not injurious. If the cuttings be started in hot-beds, covered in bad weather, and during nights with straw or grass mattings, they can be raised just as hardy as if planted in the field, and will have the advantage of being from three to five weeks earlier in their growth. I

have transplanted cuttings thus raised, taking advantage of a good season, just after a rain, without their leaves ever drooping, or the plants being put back a single day in their growth.

From close observation I unhesitatingly say that I consider the hot-bed as above described the best mode of starting the cuttings.

EDWARD P. ROBERTS,

Ed. Farmer & Gardener.]

"I had intended to supply an omission made in regard to the preparation of cuttings; and the remark I would make, applies especially to cuttings of single buds. It is the main stem that I recommended to be cut into single buds, and it is the strongest part of the stem that throws out the lateral branches. As every lateral starts out, there is no bud (at least none that will readily grow,) remaining at the joint; and it is therefore necessary, in preparing the cuttings, that the lowest bud on the lateral should be left to the main stem. I lost many plants last spring by not attending to this.—And the sellers of mulberries, who supply *trimmed* plants, should always prune in this way, otherwise, the best portion of the wood on the whole plant will be of little value.

"I have almost determined to plant a portion of our cuttings *this fall*; say about the last of Nov. or 1st of December. The slightest covering of earth, I have always found sufficient to protect them during winter. If thou hast noticed the plants in spring, when they are uncovered for the purpose of planting, especially if it be not very early, thou hast no doubt observed that every good bud has sprung. By exposure to the dry air, many of them perish before they are planted. Had they remained under a proper depth of soil, every bud, starting as they do at the same time, would have shown itself above the ground. Why cannot they be protected in the field equally as well, without being subjected to spring handling and removal? It would be an easy matter to cover the stems in the furrows two or three, or even four inches deep, and remove the covering in the spring, which would be a good working. I have been thinking all the summer I would plant a portion of my crop in this way; but I should be afraid to recommend it strongly to others, lest they might be a failure. If, however, it should succeed as well as I am convinced it would, almost every bud would produce a tree, and by vegetating earlier, it would produce a much finer tree than by the common mode. I perceive that Cheney, who is a very experienced cultivator, recommends that *layers* should be planted in the fall.—At all events, I know from experience that the earliest spring planting is much to be preferred to deferring it until the ground becomes somewhat warm. Like grains of early planted corn, the cuttings are throwing out roots, the germ may not appear above ground, much sooner than the late planting. Unless the ground was clean, there might be danger from the field mice. Please to give thy views on this subject.

"Wilt thou take it amiss, if I venture to assign one or two reasons why thou shouldst not offer thy plants of 1839 for 12 1-2 cents, as thou didst propose doing some time ago? I would not deter thee from doing so, for the purpose of

keeping up the price. If they do not sell for more than 9d. I shall be perfectly satisfied. It is enough for them.—But can any one individual reduce the market price by offering his crop at reduced rates, or even by giving them away? Perhaps thou mayest grow a million. If there be a brisk demand for 20 million, which will probably be the extent of the supply next year, a million or more or less will have very little effect upon prices. By contracting now to receive much less than they will probably command, thy efforts to reduce the prices will be unavailing, and thou wilt be voluntarily depriving thyself of the profits to be derived from the culture. Speculators, also, might buy up thy whole crop, and retail it at greatly advanced rates. Indeed it is only the speculator, perhaps, that would now contract to receive plants to be delivered a year hence. So that I see no probability of thy effecting thy object by this course. It is however very possible that by another year, public feeling on the subject may be more rational, and that prices may correspond with the actual value of the plant for which it was designed by nature. We are now going through the paroxysm of the fever, in due time it will abate, health will be restored, and reason resume her empire. Let us wait patiently for it, and do all we can to promote the culture of silk, until the question is settled whether or not it can be introduced into this country as a profitable branch of agriculture." * * *

"I think I have obtained some valuable information respecting the action of bone manure in growing mulberries. When I was at the north, I inquired particularly about its general value, at Boston, Philadelphia and Baltimore. At Boston, there is a very large manufactory. At all three places, the price for crushed bones is 35 cts. per bushel. I purchased 200 or 300 bushels in Baltimore; but it was not until after I left there, that I heard of its good effects on mulberries. A grower in Burlington had applied some to a small lot of ground, and the effect was so beneficial, that I heard the trees spoken of as being the finest of the whole country. They had tried to keep the knowledge of it a secret there, for their own advantage; but I intend that it shall be known. I am promised the result of another experiment. I am fully convinced that with the use of \$5 worth of bone manure to the acre, our highest and dryest and poorest lands can be made to produce trees 5 or 6, or 7 feet high.

"Please inform me what was Sydney Weller's mode of saving his immature cuttings. I heard thee detail it, but perhaps I have forgotten some part."

In answer to the foregoing inquiry, and for the benefit of all others of our readers, the information derived from Mr. Weller's statement of his practice will here be given.

All who have observed the *Morus Multicaulis*, know that the plants of one year's growth have a large portion of the latest formed stem and branches so green and tender as to be unfit to withstand severe frosts. This part of the plants, (with all the buds thereon, though frequently amounting to one-fifth, or more of the whole number on the plant,) has, until lately, been deemed worthless and taken no account of in sales, or in planting.—But in our own small prac-

tice, it was observed last spring, when the plants were taken out of the earth under which they had been kept through winter, that the unripe buds, to the very extremities of the twigs, had begun to start in growth, and of course that they possessed enough vital power to produce plants, if properly managed. The proportion of unripe wood this year is numerously great, owing to the early and continued drought of summer having been followed by abundant late rains. After the first year, there is a very little of the wood left unripe, as the branches generally ripen to the ends.

Mr. Weller had earlier learned the vital power and value of these unripe buds, and has practised with success the following manner of saving them separately. As soon as there has been frost enough for the leaves to fall off, and before any more severe cold weather follows, all the unripe ends of branches and stems are cut off, including about an inch, or one bud, of the adjoining ripe wood below. These are laid in a shallow pit or trench, or even on the cleanly scraped surface of the earth, so as to be more than four inches thick; and then are covered over with clean and friable soil, (sand would be better,) which is to fill up all vacancies between the twigs, as well as to cover them. Then, any kind of earth may be heaped on, so as to cover the twigs 12 or 18 inches deep, if freezing is feared; though a few inches depth has always proved sufficient. As in all other cases of winter-pits or trenches to contain multicaulis plants, the access of too much water from rains should be prevented, by choosing an elevated spot, or surrounding it with a ditch. Mr. Pleasants' views and advice as to choosing a cold situation, to prevent the too early springing of the buds, are likely to give still greater value to this practice of saving and using unripe buds. Mr. Weller relies on his unripe buds, saved as above, to be nearly as certain as the ripest, to vegetate and produce, and this information may be worth several hundreds of dollars, this year, to every one who has as much as an acre in multicaulis plants. It is highly necessary to avoid having any vegetable matter in contact with the buried twigs as mouldiness and rotting will be produced, and perhaps may spread beyond the twigs first affected.

As to the capacity of the unripe buds to germinate and to produce good plants, if preserved properly through winter, (without being cut from the plants, we knew it likewise from the information of John E. Meade, Esq., of Prince George, who availed of the knowledge so well that he has now as many growing trees as he bought cuttings last spring—the unripe buds, which are not charged, having fully made up for all the failures of the ripe. By the way, cuttings bought by Mr. Meade last spring, cost him (at an unusually low price) \$10, and the crop from them is worth \$1000, at the present enormous prices and ready sales.

We saw Mr. Weller's nursery, (in Halifax county, N. C.,) on October 16th. Tender plants, (such as sweet potato vines,) had then been partly killed by frost, but his mulberries were barely touched, on some of the youngest top leaves, and many grow, or ripen, much more yet. He had worked the ground late in August; and that, (as we think, improperly late cultivation) as well as the late rains, had caused a very late growth, and an unusually large proportion of unripe wood and buds. He does not trouble himself to cut down and cover, or to use any other means to

protect in winter, any of his plants, except the unripe extremities of branches. He considers all the ripe wood as perfectly safe. This is a most important advantage of the climate of North Carolina and Virginia. But though cutting down the entire plant is unnecessary to protect the ripe wood [from cold, still as it will be done at any rate, for cuttings, while the great demand lasts, it will be better to protect the unripe buds.

Mr. Weller's nursery ground is quite sandy, and it had been very poor, and most of it now far from rich. Yet his one-year's plants are generally four and sometimes six feet high; showing the great advantage of using the lightest soil. At Gaston, on the rich as well as light soil of the Roanoke low-grounds, a small patch, belonging to W. W. Wilkins, esq., would average, certainly 150 good buds, (and he thinks 200) on the plants of this year's growth. It is certainly the finest growth we have seen. These plants, from buds planted last spring, in seven months thereafter would sell for \$3 a piece—perhaps for \$5, at the present prices. Some waste building lime had been given to this spot. We had been before inclined to believe that calcareous manures are peculiarly adapted to the mulberry, from having observed the usual locations, and degree of luxuriance, of the native growth. Mr. Weller has found very decided benefit from sprinkling the rubbish of old mortar, (from demolished brick-work,) in his rows of multicaulis cuttings. The great value, too, of bone-manure, (though bones are of phosphate of lime,) as stated by Mr. Pleasants, is a valuable fact, and helping to confirm the opinion of the demand of this plant for lime in some of its forms of combination.

Mr. Weller plants at any time in winter or spring, when he has the time. He has no objection to, or fear of, fall planting, but has no spare labor at that season. He cuts up, generally, into single-bud cuttings, and drops the bits into the furrow, with no care as to their position, and about seven or eight inches apart, (sows three feet) and covers carefully. We think a better mode would be to stick the lower end of the cutting into the soft mould, perpendicularly, and to cover the bud not more than an inch, if near the time to sprout. The lower extremities, where the roots form, in this case would be as low as possible, and so much the more likely to keep moist; and the bud be very near, as it ought to be, to the air. These objects will be still the better answered, by cutting the branches as close above each bud as is safe, and of course giving as much length as possible of each cutting below the bud.

Besides the rapid mode of propagation from single bud cuttings, when they are allowed to have the growth of an entire season, there is another process which may be added, and by which the product may be still more and greatly multiplied.—This is by *summer layers*; which mode is extensively practised by some of the largest dealers and nurserymen, and which is certainly an admirable means of making profit by imposing on distant and ignorant purchasers, still more than to obtain the legitimate gain of the actual increase of the stock of plants. As described to us, the following is the most approved and productive plan of raising from layers. Early in July, or as soon as the young shoots are 10 to 15 inches high, let each be

bent down and laid on the earth, and confined there by a forked stick, and a little earth be laid on one of the buds near the extremity. The leaves of the buried buds should be cut off. From these, roots soon strike out, and each extremity runs up rapidly into what northern nurserymen call "a tree." Soon after the first operation, every alternate bud, of the stem laid down, should be covered with earth in like manner, and from each of the intermediate buds left uncovered, there will be thrown up other upright shoots, of which the connecting original stem may be cut apart, before the growing season is over, and thus form so many of what are termed "rooted and untrimmed" trees, and sold as such, formerly at 25 to 38, and now at 60 cents or more, a piece. In this manner in a good season, and during rapid growth, we are informed that sometimes six, or eight, and even ten "rooted trees," may be raised in a year from a single bud planted the same season. This is a very useful practice to increase a small stock rapidly; as these secondary, though very inferior plants, if well preserved through winter, will furnish a greatly increased stock of buds and roots for the next year's planting. But to sell these plants, of half a season's growth, to distant purchasers as "rooted trees," without explanation, is a gross fraud, which has been most extensively practised already, and by which hundreds of thousands of dollars have been, and will be, unrighteously gained.

From this description many purchasers of plants will not understand the manner in which their supplies were produced. For plants from layers must necessarily be of small height, the growth late, and a large proportion of the stem unripe—and always without branches, (though sold perhaps at nearly double price for being "untrimmed"—) and the roots, consisting of a small horizontal bit of the original stem converted to root, with merely a few thread-like rootlets extending therefrom. Purchasers should guard against receiving the products of layers as "rooted trees," whether sold as "untrimmed" or not.

Cuttings, also, may be separated from young plants in any wet season, during summer, and, if set out immediately, will have, and form separate rooted-plants. We are inclined to believe that the *topping* of young plants, for this object, in July, would be useful, by causing more extension of side-branches, and better maturing the buds on the extremities.

Among the great and unexpected products from this year's growth of mulberry plants, there will be an abundant harvest of law-suits. We know of several having been already commenced. There will be many novel points of agricultural law for the courts to decide, which will be curious, and not a little amusing to all except the litigant parties.—All persons who make contracts, should be very cautious as to the other party with whom they deal, and the manner of fixing the conditions.

We will close these scraps of information with some arithmetical calculations and estimates, which perhaps may be of service to readers who design either to buy or to sell, or who are in possession of multicaulis plants. We have had reason to be surprised to find, in sundry cases, how little had been done, even by dealers to a large a-

mount of money, in the way of estimating arithmetically, the present or prospective amounts, or market prices of their possessions or purchases. It is, therefore, that we have thought that these *mulberry statistics*, and estimates, trifling and humble as they are, may not be useless.

On page 592, vol. 2, of Farmers' Register, and in the appendix to the Essay on Calcareous Manures, (pp. 103, 104) there is a table of the number of plants, or rectangular spaces, in an acre, at every distance that can be desired. This will be found far more convenient for reference to show the number of mulberry plants to an acre, than for the other purposes for which the table was originally designed.

According to this table, an acre of land planted with cuttings at the distance of 3 feet by 1, would take 14520 plants. This allows abundant space for the first year's growth. At 3 feet by 1½ inches, there would be 15125 plants; and therefore, for round numbers, 15,000 may be taken as the number of cuttings proper for an acre, and which, if not growing unusually large, would not be too thick, even if all were to live. Upon this ground, the cost and returns (and conjectured profits) will be estimated.

COST.

15,000 single-bud cuttings, bought Nov. 1838, at 2½ cts. each, make the cost for an acre,	\$375
Interest on do.	22
Keeping cuttings through winter and cultivation in 1839,	25
Rent of land,	18
	440

PROFIT.

Suppose of 15,000 cuttings, 6000 to fail, and only 9000 to grow, and these to average only 30 good buds each, and these buds to sell in Nov. 1838, at but half a cent each, then the product will be,
9000 plants, $\times$ 30—270,000 buds $\times$ ½ ct. \$1350
9000 roots, at 3 cents each, 270

Gross product,	1620
Deduct cost,	440

Leaves, upon these data, clear profit, 1180

This profit, or even half as much, ought surely to satisfy the most eager; and as every expense is charged full high, and the failures allowed are far too many, for an average season, (and even if such unusual loss should occur, the vacant spaces might be filled by summer layers,) there is nothing wanting to almost ensure the full profit, except this one datum, that buds next fall must be worth a half a cent each. Of this chance, we leave each one to conjecture for himself.

If, as most persons now believe, the price should be much higher than the above stated, there would be more than a proportional increase of nett profit, as no more expense will have to be paid; and if the present enormous prices of the cuttings and roots should be maintained in the next crop, (say 2½ cents the bud, or 15 cents the foot,) then the gross product of the acre would rise to the almost incredible amount of \$8100

And, deducting expenses, 440

The nett profit would be \$7660

Enormous as is this statement of profit, it is believed that it has been equalled this season in sundry cases. The most remarkable example, in which it is believed that these profits have been fully equalled, is in the large nursery near Richmond, cultivated by Wm. Kenrick, a nurseryman of Newton, near Boston; though under all the disadvantages of cultivating by agents, and on rented land so many hundred miles from his residence.

THE CORN PLANTER.

Mr. S. Woods of Worcester, exhibited at the Worcester Cattle Show, an ingenious, and we are inclined to think a very useful invention.—Mr. Woods has the right principle; he can plant any number of kernels of corn any distance apart. It is drawn by horse power, and a man instead of fatiguing himself by the old fashioned method of planting, may sit upon his seat and enjoy his *otium cum dignitate*, with none to molest or make him afraid, with no care, little labor, and sure to have his work done with mathematical precision, by his correct and untiring locomotive. The price of the large machine is \$30. It can be made, however, on a smaller scale. The large machine is admirably adapted to the western prairie lands. A farmer there, with this machine, may take seed enough with him to plant a dozen acres, and after giving it to suit himself, may mount on his box, and drive round at his leisure, sure to accomplish much more work in this way, and in a better manner, than if he delved and tugged like a galley slave. By a judicious management, Mr. Woods will realize a handsome remuneration for his invention. We would suggest to him the advantage of depositing his machines in some good place in the city, when the representatives and others doing business at the general Court next winter, can have a chance to examine it.—*Yankee Farmer*.

WEST'S NEW & CHEAP THRASHING MACHINE, Patented July 26th, 1838. We know nothing of this Machine excepting what we learn from an advertisement and accompanying certificates; but if it is equal to what it is "cracked up" to be, it surely is a machine very much needed by a great many farmers.

From the advertisement it appears that it is a man power machine and may be advantageously worked by one man, who propels and feeds the machine, or by two who keep it constantly going by changing, one propelling the machine and the other raking off the straw and putting up the bundles. It thrashes mowed or reaped grain as clean as horse power.—It is not dangerous nor liable to injury. If the wheat be good, one man will thrash from ten to fifteen bushels, and two men from twenty to 30 bush. per day. Those who wish to purchase should apply to Ammi West, Greene, Maine.

One certificate shows that fifteen men have used this machine at their barns, that they are confident that it will come into general use, and that thirty bushels per day can be thrashed by two men with as much ease as ten bushels with flails. In another certificate, two men stated that they had worked this machine eight days, and that they had worked with as much or more ease than with flails, and did three times as much.

It is not our intention to recommend this ma-

chine, but merely introduce it to the notice of our readers. Will the proprietor please inform us what is the price of his machine, how durable it is, how much room it requires, how much it weighs, &c. and if he will send one to the Yankee Farmer Office, Boston, and another to Portland, they will be put into good hands and have a fair trial.

What say you friend West, will you bring on your better "notions?"—*ib*.

FOR SALE,

A valuable FARM of prime soil, on the Western Run in Baltimore county, about two miles north west of the 14th mile stone of the Baltimore and York turnpike road, and at the same distance from the depot of the Baltimore and Susquehanna rail road, at Cockey's tavern, in a rich, highly cultivated and healthy tract of country.

This farm contains from 260 to 270 acres, having a full proportion in wood, much of which is building timber, peculiarly valuable in that neighborhood; is in the best state of cultivation; a considerable part in productive timothy meadow, and the residue of the arable land, not in grain, is well set in clover, the whole under good fencing, laid off into convenient fields, each of which is well watered. The farm has a large quarry of excellent building stone. There are on the premises an apple orchard of select fruit trees, which seldom fail to bear abundantly; a valuable mill seat on the Western Run, with a race already dug. There is no location in the country more favorable for a grist mill, having the advantage of a rich and thickly settled neighborhood, and a good public road leading thence to the turnpike road. Buildings substantial and convenient, being a STONE DWELLING, and kitchen of two stories; a large stone Switzer barn, with cedar roof and extensive stabling below; large hay house and stable for cattle; stone milk house near the dwelling, with a spring of fine never failing water, with other out-houses. On the country road near the mill-seat a good house and shop for a mechanic, under rent to a good tenant. It is well known the lands on the Western Run are in every respect equal, if not superior to any in the county. Adjoining or near are the lands of Col. N. Bosley, Daniel Bosley, Thos. Matthews and others. The water power, with about 20 acres of land, is so situated that they may be detached and sold separately, without injury to the rest of the farm for agricultural purposes. Terms of sale will be liberal. Apply to

NATHANIEL CHILDS,
on the premises, or to
WILLIAM J. WARD,
oc 23 tf Fayette, near Calvert st. Baltimore.

SILK AGENCY,

Corner of E. and 7th streets, Washington City, D. C.
The subscriber having commenced an Agency for the purchase and sale of SILK MULBERRY TREES, and all articles connected with the growing of Silk, offers for sale the following varieties of Mulberry Trees at Baltimore prices, viz. Multicaulis, Alpine, Broussa, White Italian and Canton; also Mammoth White Silk Worm's Eggs, warranted to be of superior quality. All the recent publications on silk growing for sale, and subscriptions received for the various periodicals devoted to that subject.
no 20 J. F. CALLAN.

FOR SALE,

COLUMBUS, a well bred race horse—his pedigree, which is perfect, will be given. Enquire of
no 6 St EDW. P. ROBERTS, Ed. Farm. & Gard.

GENUINE BARNITZ PIGS.

The subscriber has for sale the following pigs, which are warranted genuine:

2 pair 4 months old, and
1 pair 10 weeks old.

The Barnitz hogs are distinguished for their early maturity and size, attaining upon clover pasture from 250 to 300 lbs. when 12 and 15 months old. The price of the largest size is \$15 a pair; that of the smallest 10 a pair.

Applications by letter to be POST PAID.
EDWARD P. ROBERTS,
Baltimore, Md.

oc 30

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every Monday

	PER	FROM	TO
BEANS, white field,	bushel.	1 25	—
CATTLE, or the hoof,	100lbs	8 00	9 90
CORN, yellow	bushel	85	—
White,	"	84	85
COTTON, Virginia,	pound	9	11
North Carolina,	"	9 1/4	11
Upland,	"	9 1/4	11
Louisiana — Alabama	"	11 1/4	12
FEATHERS,	pound.	45	50
FLAXSEED,	bushel.	1 12	—
FLOUR & MEAL—Best wh. wh't fam.	barrel.	10 00	10 50
Do. do. baker's,	"	—	—
SuperHow. st. from stores	"	7 75	7 87
" wagon price,	"	7 75	7 75
City Mills, super,	"	—	—
" extra	"	8 00	—
Susquehanna,	"	—	—
Rye,	"	5 50	—
Kiln-dried Meal, in hhd.	hhd.	19 00	—
do. in bbls.	bbl.	4 00	—
GRASS SEEDS, wholes. red Clover,	bushel.	—	—
Kentucky blue	"	—	—
Timothy (herds of the north)	"	—	—
Orchard,	"	2 00	2 50
Tall meadow Oat,	"	—	3 00
Herds, or red top,	"	90	1 00
HAY, in bulk,	ton.	12 00	16 00
HEMP, country, dew rotted,	pound.	6	7
" water rotted,	"	7	—
HOGS, on the hoof,	100lb.	8 50	9 00
Slaughtered,	"	—	—
HOPS—first sort,	pound.	9	—
second,	"	7	—
refuse,	"	5	—
LIME,	bushel.	32	33
MUSTARD SEED, Domestic, —; blk.	"	3 50	4 00
OATS,	"	40	42
PEAS, red eye,	bushel.	—	1 12
Black eye,	"	1 00	1 12
Lady,	"	—	—
PLASTER PARIS, in the stone, cargo,	ton.	4 50	—
Ground,	barrel.	1 50	—
PALMA CHRISTA BEAN,	bushel.	—	—
RAGS,	pound.	3	4
RYE,	bushel.	20	93
Susquehanna,	"	—	none
TOBACCO, crop, common,	100lbs	4 00	4 50
" brown and red,	"	4 00	6 00
" fine red,	"	8 00	10 00
" wrappery, suitable	"	—	—
" for segars,	"	10 00	20 00
" yellow and red,	"	8 00	10 00
" good yellow,	"	8 00	12 90
" fine yellow,	"	12 00	16 90
Seconds, as in quality,	"	6 00	—
" ground leaf,	"	5 00	8 00
Virginia,	"	4 50	6 00
Rappahannock,	"	—	—
Kentucky,	"	5 00	8 00
WHEAT, white,	bushel.	1 80	—
Red, best	"	1 65	1 75
Maryland	"	1 70	1 72
WHISKEY, 1st pf. in bbls.	gallon.	43	45
" in hhd.	"	43	—
" wagon price,	"	—	—
WAGON FREIGHTS, to Pittsburgh,	100lbs	2 50	—
To Wheeling,	"	2 75	—
Wool, Prime & Saxon Fleeces,	pound.	50 to 55	—
Full Merino,	"	45 50	—
Three fourths Merino,	"	40 45	—
One half do.	"	35 40	—
Common & one fourth Meri.	"	35 40	—
Pulled,	"	30 33	—
POTATOES, 60 to 70 cts. a bushel.	"	—	—

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,	barrel.	—	—
BACON, hams, new, Balt. cured,	pound.	15	—
Shoulders, do.	"	13	—
Middlings, do.	"	13	—
Assorted, country,	"	13	—
BUTTER, printed, in lbs. & half lbs.	"	31	37 1/2
Roll,	"	25	31 1/2
CIDER,	barrel.	1 75	2 00
CALVES, three to six weeks old,	each.	5 00	6 00
Cows, new milch,	"	25 00	40 00
Dry,	"	12 00	15 00
CORN MEAL, for family use,	100lbs.	1 75	—
CHOP RYE,	"	1 50	1 60
EGGS,	dozen.	12 1/2	—
FISH, Shad, No. 1, Susquehanna,	barrel.	9 75	10 00
No. 2,	"	9 50	—
Herrings, salted, No. 1,	"	5 75	—
Mackerel, No. 1, — No. 2	"	12 50	—
No. 3,	"	—	7 25
Cod, salted,	cwt.	3 25	3 37 1/2
LARD,	pound.	14	15

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

U. S. Bank,	par	VIRGINIA.
Branch at Baltimore, do	do	Farmers Bank of Virgi. par
Other Branches, do	do	Bank of Virginia, do
MARYLAND.		Branch at Fredericksburg, do
Banks in Baltimore, par		Petersburg, do
Hagerstown, o		Norfolk, do
Frederick, do		Winchester, do
Westminster, do		Lynchburg, do
Farmers' Bank of Mary'd, do		Danville, do
Do. payable at Easton, do		Bank of Valley, Winch. par
Salisbury, 1 per ct. dis.		Branch at Romney, ... par
Cumberland, par		Do. Charlestown, ... par
Millington, do		Do. Leesburg, ... par
DISTRICT.		Wheeling Banks, ... 2 1/2
Washington, }		Ohio Banks, generally 3
Georgetown, } Banks, 1 p.c.		New Jersey Banks gen. 3
Alexandria, }		New York City, par
PENNSYLVANIA.		New York State, do a 1/2
Philadelphia, par		Massachusetts, 1 1/2 a 2
Chambersburg, 1/2		Connecticut, 1 1/2 a 2
Gettysburg, do		New Hampshire, ... 1 1/2 a 2
Pittsburg, 2 1/2		Maine, 1 1/2 a 2
York, 1/2		Rhode Island, 1 1/2 a 2
Other Pennsylvania Bks. 2		North Carolina, 3 a 3 1/2
Delaware [under \$5] 4		South Carolina, 4 a 5
Do. [over \$5] 1 1/2		Georgia, 5 a 5 1/2
Michigan Banks, 10		New Orleans, 7 a 8
Canadian do. 10 1/2		

SPLENDID BLOODED STOCK FOR SALE.

The proprietor of Covington farm will dispose of the following fine bulls on reasonable terms, v. z.
One bull two and a half years old.
One do. six months old.

of the improved Durham short horn breed; the dam of the first was got by the celebrated bull Bolivar; for size, form and beauty they are not surpassed by any animal in the state.

Three Devon Bulls, one of which is seven years old next spring, and the largest Devon in the State. The Devons are from the stock of the late Wm. Patterson, and of undoubted purity.

Two half Devon bulls.
Two bulls half improved Durham short horn, and half Devon.

One splendid bull, a cross of the Bakewell, Alderney and Devon.

One bull, half Alderney and half Holstein.

These fine animals may be seen at Covington farm, near Petersburg, Frederick county, Md. on application to James L. Hawkins, Baltimore, or to
se 11 f FREDERICK EBERT, Manager.

SPRING CLOVER SEED,

Just received and for sale, by
R. SINCLAIR, Jr. & CO.

oct. 16

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CHINESE MORUS MULTICAULIS, &c.

At the Linnean Gardens, Flushing, New York.



50,000 splendid TREES of the genuine Morus Multicaulis are yet remaining for sale at moderate prices according to their size; and also Cuttings of the same. None of the Humbug kind are sold at this establishment. Also 20,000 trees of the splendid Morus Expansa which has very large leaves, greatly loved by the worm, it is very

hardy, and yields silk of the first excellence. A great supply of the Moretta or Alpine Mulberry, the Canton, Dandole, Broussa, Asiatic, Pyramidalis, Rose of Lombardy, Morus Alata, and other varieties.

Also Fruit and Ornamental TREES, Plants and Seeds of every kind, and an immense stock of Bulbous Flower Roots, just arrived from Holland.

Silk Worms Eggs of every kind at the lowest prices, and White Italian, Canton, and Moretti or Alpine Mulry Seeds in any quantity. The Morus Multicaulis Trees raised here have one-third more joints and buds than southern trees, and of course are worth 50 per ct. more for propagation; and the wood becomes as mature and perfect on the high exposed position our Nurseries occupy as at any place in the Union. Also, Fruit and Ornamental Trees, Bulbous Roots, Green House Plants, and Seeds of all kinds, for sale in large or small parcels.

Priced catalogues will be sent to every applicant, and orders per mail will be executed with as much precision and dispatch as if the purchasers were present, and will be packed so as to be sent to the remotest region with safety.

no 20 2m

WM. PRINCE & SONS.

CHINESE MULBERRY TREES.

American Silk Agency, No. 5, Bank street, Philadelphia.

The subscriber having opened a permanent Agency for the purchase and sale of all articles connected with the culture and manufacture of Silk in the United States, offers for sale all the different varieties of MULBERRY TREES, suitable for raising the SILK WORM; viz: Morus Multicaulis Alpines, Brussa Multicaulis Seedlings, Morus Expansa, Multicaulis Cuttings, Improved Italian Trees, &c. Also, Cuttings from Norton's Virginia Seedlings, and Cunningham's Prince Edward GRAPE VINES. These vines produce an abundant crop of fruit, warranted not to rot or mildew and are fine for the table, and capable of yielding the finest wines.

S. C. CLEVELAND, Agent.

Those who may wish to enter into this profitable branch of national industry, will do well to call at the Agency, and see that they are well instructed in the value of the trees they purchase.

N. B. The particular attention of those engaged in the culture and manufacture of American Silk, whether of trees, Eggs, Cocoons, reeled or manufactured, is called to this agency. The Agent will give every attention to Sales, and prompt remittance of proceeds of any article sent to him. Those who may wish to purchase and enter in this valuable branch of home industry, can obtain from the agent every information, and also such articles as they may want without fear of deception.

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AGRICULTURAL IMPLEMENTS AND SEED SEORE.

THE SUBSCRIBER informs the public that he keeps constantly on hand at his old establishment in Pratt-street, near Hanover, a large assortment of PLOUGHS and Agricultural IMPLEMENTS generally, which are too numerous to name in an advertisement, but invites such of the public who are in want of any articles in his line to call, assuring them that his work shall be as well made, of as good materials, and on as reasonable terms as any in the State. His patent Cylindrical Straw Cutters made on his late improved plan are kept at all times on hand, of various sizes and prices, with wood and iron frames—and he challenges its equal in any part of the world. Having an iron foundry attached to my establishment, all orders for Ploughs and Machine castings can be furnished at short notice and on reasonable terms.

In store—Herds and Orchard GRASS SEEDS, of prime quality; also, Landreth's superior GARDEN SEEDS. He is also agent for Mr. Samuel Reeves' Nursery, near Salem, New Jersey, whose fruit trees he can recommend to the public with confidence. Those wishing Trees from that Nursery this fall should hand in their orders immediately.

J. S. EASTMAN.

A HALF DURHAM COW FOR SALE.

The subscriber has for sale a beautiful fashionable roan half Durham Cow. She is fresh in milk and only 4 years old. Her price is \$75. Applications, post-paid, to be made to

ED. P. ROBERTS.
Who has also for sale several full bred Devons, males and females.

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THE FARMER & GARDENER.

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, E. P. ROBERTS AND SAMUEL SANDS—EDITED BY E. P. ROBERTS.

No. 33.

BALTIMORE, MD. DEC. 11, 1838.

Vol. V.

THIS publication is the successor of the late

AMERICAN FARMER

and is published at the office, at the N. W. corner of Baltimore and North streets, over the Patriot office, at two DOLLARS AND FIFTY CENTS per annum, if paid within one month from the time of subscribing, or \$3 if after that time. All letters to be post paid.

BALTIMORE: TUESDAY, DEC. 11, 1838.

The Tobacco Crop of Maryland—The Upper Marlboro' Gazette estimates that the tobacco crop of Maryland for 1833 will not exceed one-half the usual annual average crop of the state, say from 11,000 to 12,000 hogsheads, and that chiefly of an inferior quality.

THE SILK INTEREST.

The deep and profound interest which is abroad in every direction of the country on the subject of the Silk culture—and the meeting of the *National Convention of Silk growers*, which is to take place in this city this day, seem to offer a fit occasion for us to make some remarks in relation to those questions which will legitimately come up for discussion and action in that body. But before we enter upon this branch of the subject, we would ask permission to be indulged in a few remarks of a preliminary nature.

The mere growing of trees for profit, we consider as altogether an object of secondary importance, when compared with the business of *making silk*; for however lucrative the former may prove to those individuals who may be engaged in raising them, or to gentlemen who may speculate in them, the advantages and benefits to enure to the nation from this source, is of minor moment to the production of silk; for so soon as the country is supplied with a stock of trees, this agricultural resource will be cut off, and though many persons may, in the mean time, have realized large sums of money, the benefits, in a national point of view, will prove to have been inconsiderable, because of its want of permanency. There is nothing more true or self-evident in political economy, than that it is the products of labor which imparts wealth to individuals and to nations; for, after all, it is the aggregation of the wealth of the former, which constitutes that of the latter; but unless those products have a solid foundation to rest upon, by which they may be

perpetuated, any sudden suspension of the resources arising therefrom, will be found, by its revulsive action, to prove infinitely more injurious in its effects to the well-being of the community, than would be justified by former benefits received. The cultivation of the Mulberry tree for sale, gives, it is true, employment to many farmers and laborers, creates values for the grower and speculator; but if we expect the nation at large to derive any benefit from the present spirit that is abroad through the land, the attention of the people must be directed to the *early production of silk*, in all its forms, from the cocoon to its ulterior destination in manufactured goods. A great object should be the encouragement of the people to make immediate experiments in feeding and tending the silk-worm. Let them begin on a small scale, as soon as they may have secured however limited a supply of foliage. By so doing they will derive from practical observation, a knowledge of the wants and habits of that ingenious insect, and thus obtain information of immense value—information which will enable them, when they shall have extended their orchards and increased their supply of foliage, to go to work advisably, and carry on their operations with intelligence, economy and profit. The study of Law and Physics, lays the groundwork of a knowledge of those sciences—it expands the mind and develops its resources—but the mere student of either would not be qualified without extensive practice to manage intricate and complicated cases with tact and judgment—and so it is with the Silk culture. A man may read until his eyes grow dim with age—he may raise Mulberry trees until he becomes as familiar with the *modus operandi*, as he is with his garter, and if he shall have omitted to tend worms and study their nature and economy, begin when he may, he will find himself a novice in the business. It has been said by an eminent American, that education was not a necessary ingredient in the great constituent mass that qualifies a man for a ruler—but that it was *action*—and although we do not subscribe to this dogma, to the extent to which his zeal carried him, we maintain that *practice*, or *action* if you please, is absolutely necessary to make a *successful silk grower*. While tending his little family of silk-worms, an

individual of close observation may learn more in a single season than he could in seven years of mere book study. This is our opinion, and we give it with frankness, knowing that it is our duty to speak honestly in a matter of the deepest interest to the country. In saying this, we would not be understood as desiring to undervalue the information to be gained from the study of books when properly directed; for we hold the reverse to be the true doctrine; but we wish to impress the importance of submitting theory to the test of practice, deeming the latter essential to the successful application of the former. Being thus impressed, we have felt it incumbent on us to submit our views to the consideration of the Convention, leaving it to them to judge of them as in their wisdom they may think meet and proper.—We believe with proper care and well directed energies, the Silk business is capable of being made in twenty years to add twenty millions of dollars to the value of our exports, and of being the means of greatly equalizing our exchanges with Europe; and hence our anxiety that the present Convention should lend the force of their character, in an endeavor to impress upon the people of this Union the advantages to result from going early into the feeding of worms and the production of silk, as it is from this part of the business alone that solid and lasting benefits are to accrue to the country.

Having completed our preliminary remarks, we will throw out such other suggestions as appear to us to be worthy of the consideration of the Convention.

1. We believe that they should appoint committees in each State which may be represented in their body, to memorialize their respective legislatures to grant bounties on the raising of cocoons, making of raw silk, sewing silks, twist and silk cloths.

2. We believe that the legislatures should be memorialized to pass laws making it *felony* to steal *Morus Multicaulis* trees, or any other Mulberry trees raised for the purpose of feeding the silk-worm. And in order to render such laws acceptable to the people of the several states, they should be general in their character, and embrace growing crops of all descriptions, as well as forest trees. As the law now stands in most of the

states, it is not *felony* to take any portion of a man's crops or timber which may be growing on his premises, provided the taking away and gathering or cutting down are simultaneous—that is, if a villain after pulling your corn or other growing crop, or cutting down your timber, take it away without first leaving your premises, the offence is only a *trespass*; but if previous to the carrying away, he leave your premises and return to carry off his booty it is *felony*. For the first offence a civil suit for trespass is the redress—for the latter a *criminal* action will lay. The day, we fear, has passed when such distinctions may exist without doing great injury to the best interests of society. We look upon the *distinction* here set up by the common law, between *trespass* and *felony*, to be a distinction without a difference, unless it be an object worthy of a moral people, to encourage the dishonest and idle to spoliage upon and rob the worthy and industrious of the earnings of their labor. In a country like ours, boasting of its laws, every man should be protected in the possession of his property, and he who violently or fraudulently deprives another of his property, should be made to atone to that society, against whose morals and laws he has sinned.—Laws should have for their primary object protection of life, liberty and property—their intention should be to bind the villain to society, and certainly they should not, by weaving fine drawn distinctions in favor of evil doers, tempt the unprincipled to the perpetration of crime, and to prey upon their neighbors.

3. We believe that the legislatures of the several States and Congress should be memorialized to disseminate information connected with the Silk culture gratuitously among the people, and that in addition, the latter body ought to be asked to admit, for a limited number of years, free of duty, all machinery connected with the Silk business and works treating upon the subject.

4. We believe that a committee should be appointed to collect facts and information generally connected with the Silk culture, and to publish the same in an *address* to the people of these United States.

And lastly, we believe, that much good would arise if the Convention, when it adjourn, should adjourn to meet again next year, and adopt such measures as would ensure a *full representation* from every State, Territory and District in the United States.

Having with honesty of purpose, submitted these remarks, we respectfully ask the indulgence of the body, to whom they are addressed, for our obtrusion upon their attention and time.

ROBERTS' MANUAL.

The subscriber takes pleasure in stating that the **THIRD EDITION** of his *Silk Manual* will be published in the course of the ensuing week. It contains additions and improvements which will render it of great value both to the Mulberry grower and Silk raiser, and he therefore fondly anticipates for it a generous patronage.

EDWARD P. ROBERTS.

Ruta Baga.—We copy the subjoined paragraph from the Lynchburg Virginian, because we know this root to be a valuable acquisition to agriculture, and are pleased to find the good people of the Old Dominion alive to its importance.

We have received from Jon. M. Warwick, Esq. a present of a dozen superb *Ruta Baga Turnips*, grown on his farm, a few miles from town. These turnips were raised on high land, and tho' enduring the severe drought of the last season, have attained a size rarely equalled. This successful experiment in raising this root, so valuable not only for the table, but particularly for stock, should be an inducement to engage in its culture.

FASTENING PORK, CURING HAMS, &c.

I am satisfied that it is "not good economy" to endeavor to make manure from hogs by keeping them up in a pen. I am convinced that ten bushels of corn, fed on a clean board, will make as much good solid pork, as fifteen fed on a dung heap—and with this additional recommendation, that the pork is perfectly sweet and entirely free from that nauseous flavor which is so peculiar to pork kept in a filthy state, and having their food administered to them in dung or litter. The greatest care must be observed. The hog is not by any means naturally a dirty animal.

I have noticed frequent inquiries in the Cabinet as to the best method of curing pork and hams. I would inform all inquirers that they cannot have good, sweet meat, unless it is both good and sweet before it goes into the tub. The best of salt cannot make bad meat good—but will prevent good meat becoming bad. In some parts of the country where I have dined, the pork served up at table has tasted so strongly of the pen that I could not eat it. So much for making manure from hogs. I have always had good pork and hams since I fed my hogs on a board floor, which is kept well cleansed.

On one occasion I purchased a lot of Jersey pork, 2,000 pounds. It was fat and very handsomely dressed, but it lacked one essential requisite—that good flavor which characterizes all good pork. Subsequently, I bought a lot of 2,500 lbs. raised in Bucks county. The hogs were fed on a clean board floor, with Indian meal; they had an abundance of water. No one could desire finer or sweeter meat. A few years since, I put up some pork fattened on sweet apples, with the exception of the last two weeks, during which time they were corn fed; and the pork was as sweet, solid, and fine as any I ever saw. The hogs roamed at large in the orchard until I put them up to be fed on corn.

RECEIPT FOR CURING PORK AND HAMS.

As soon as the pork becomes cool I cut and sort it, taking great care to have the tubs perfectly sweet and clean. In cutting, I take out all the spare ribs, and make pickled pork of all the side between the ham and the shoulders; cutting it into pieces of suitable size for family use. I trim the hams and shoulders well. I cover the bottom of the tub with rock salt, and then put in a layer of pork, nicely packed; then cover this layer with salt, and so on until the tub is filled. I use rock salt, and very bountifully. In six or eight days make a pickle of salt and cold water, as strong as possible, and cover the pork previously salted with it. It will then keep for years if you choose.

In preparing the hams and shoulders, I weigh several, to come at the probable weight of the whole. They are packed with great care in suitable tubs. My process is to sprinkle some coarse salt at the bottom, then pack in the hams and shoulders firmly, side by side, being careful not to put the back of one flat on the top of another.—The spaces are filled up with chines, hocks, and jowls. To about every three hundred weight of meat I take thirty pounds of rock salt, one pound of saltpetre, and fourteen pounds brown sugar, or half a gallon of good molasses, (generally the latter). Take as much pure water as will cover the meat, put it in a clean vessel, add the above articles, boil it, removing the scum as it rises, and when no more rises, set it to cool, after which pour it on the meat until it is covered 3 or 4 inches.

If the hams are small, weighing from 12 to 15 lbs., let them remain in the pickle five weeks—if from 15 to 24, six weeks—if from 25 to 45, seven weeks. When you remove them for the purpose of smoking, put them in clean, cold water for two or three hours. If there is too much salt or saltpetre adhering to the surface of the hams, the water will take it off. The smoke should be made of clean green hickory. A fire should be built only in dry weather. And when the meat has acquired a yellow tinge, not red or black, they are removed, and hung up in a dark place, where they are not disturbed by flies or vermin.

DAVID COMFORT.

Byberry, 6th mo., 1838.

Farm. Cab.

[To the above recipe, which we know to be a good one, we would only add, that a little red pepper should be rubbed over the inside of the pieces of meat, and over the top of the hock—the object of the red pepper is to keep out skippers, which it effectually does.]

From the N. England Farmer.

ROHAN POTATO.

MR. JOSEPH BRECK,—

Dear Sir—Agreeably to your request, I give you the result of my observation and experience in regard to the Rohan potato, which I have grown for three years. For the table I consider it only second rate, compared with the Chenango; in all other respects I think that it is destined to hold a very conspicuous rank, and consequently to be extensively cultivated.

I am not aware that for productiveness it has

any competitor. In the year 1836 I had four potatoes sent me from France. The product from these the present year was nineteen bushels, the largest weighed a pound and a half; they were grown in a field with other varieties, and no extraordinary pains bestowed upon them, either in relation to the culture or the quantity or quality of the manure. Coarse stable manure was used, a fork full to each hill. The land was of middling good quality, a part of it quite dry, and the crops suffered severely from the long drought. They should be planted early, by the 1st of May; if not convenient to plant by that time, I should recommend burying them in a warm place to accelerate their sprouting, which was the course I pursued the present year; or if they could be put into a hot-bed and sprouted it would probably be a better way; they should, however, be planted out before the sprouts become so long as to be in danger of breaking off in removing them. I have not cut them for planting excepting the first year. In 1837 in consequence of illness I did not have an opportunity of giving them a fair trial, not being able to give my personal attention to them. They were planted in rows and dropped three or four inches apart in the row on the north side of a high fence without any manure excepting some ditch mud. The product was only a bushel and a half, and none of them grew very large. I think it would be better to cut the large ones, especially till they become more plenty. I have no doubt I should have raised a number of bushels more had I adopted that method, notwithstanding, from the causes above mentioned, the last year's produce was small.

It is said, and I believe with truth, that the large ones are never hollow, whereas the large potatoes of other varieties are.

They are harvested with great facility, one man dug 12 bushels in $4\frac{1}{2}$ hours; the proportion of small ones was less than one bushel in nine, and they would hardly have been considered *small* the present year for any other variety.

I will mention only one more good quality which entitles it to consideration, viz., its being very solid, more so, I think, than any other variety which attains so large size that I am acquainted with.

Respectfully yours,

E. M. RICHARDS.

Dedham, Nov. 8, 1838.

REMARKS.—In addition to what Mr. Richards has stated respecting the Rohan potato we would state our experience and lay before our readers the result of our own experiment this year. From the statements made by a number of individuals, who had a few pounds of us in the spring, we were in hopes to have given a more flattering account of this potato than we are enabled to do. The produce has not been so great as we expected; but in comparison with other varieties it has done well. The St. Helena and other varieties planted, have not paid the expense of digging, and with the same cultivation which was bestowed upon the Rohan. We are of the opinion that we did not get two bushels for one planted. We planted 59 lbs. of Rohan potatoes in hills, four feet by three apart, and manured with good coarse manure. The potatoes were cut in small pieces of two or three eyes each and three pieces plant-

ed in a hill. No extra pains were taken with them. The produce was 790 lbs. Considering the complete failure of every other variety of potato on the place, we think the result upon the whole, a good one, although we fondly anticipated a crop of 40 or 50 bushels. We have had them cooked in a variety of ways; we cannot say they were very fine; as good, perhaps, as any other sort of our own raising this year; but then it should be known that we have not had even a St. Helena or any other potato that was fit for the table, the produce of our farm, the present season. We believe it will prove a valuable potato for stock, but not for the table.

J. B.

From the Genesee Farmer.

THE PHILOSOPHY OF VEGETATION.

Bones, as a whole, contain about equal quantities of phosphate and gelatine. The harder and more compact the bone, the greater the amount of phosphate, and the less the proportion of gelatine. The bones of the ox contain from 50 to 55 per cent. of gelatine; those of the horse only from 36 to 40; those of the hog from 48 to 50; and the bones of the legs and feet of the deer, elk, roebuck, and hare, give on analysis from 80 to 90 per cent. of phosphate. All the roots, such as beets, carrots, &c., and the grains, such as wheat, corn, &c., contain considerable quantities of this phosphate; and its presence would seem to be of much importance in the vegetable and animal economy. When bone dust is deposited in the ground, it speedily undergoes decomposition, and the principal ingredients in its composition are set at liberty to form new combinations, and perform a new part in the great circle of nature's revolutions. The phosphoric acid leaves the lime, and as in all its forms of existence it is one of the most exciting agents, its application to the earth is almost as immediate as the dip of the chemist's plates into the galvanic trough. The lime set free is, by the absence of the neutralizing acid, perfectly caustic, and seizing at once on whatever geine is found in the soil renders it soluble, and thus fit for immediate use by the plants while in their excited state of action. Can it be wondered at then, that bone dust should be almost instantaneous? It may be further remarked, that bone dust applied to very dry or very wet land, loses much of its efficiency; a reason for which may be found in the fact, that in the first instance the ordinary voltaic agent is but imperfectly supplied, and in the last, the acid is so diluted as to become but little superior to water itself.

The efficiency of carbonate of lime as it is generally applied to soils, is to be accounted for on the same principles. It differs, however, in this respect; in the phosphate, the acid is set at liberty in the soil, in the carbonate it is driven off by burning. Like the phosphate, the lime is at liberty to unite with and render soluble, all the insoluble geine or vegetable matter in the soil, but unlike that it furnishes no acid to stimulate the voltaic agency to more vigorous exertions. Its effects, though certain, and most beneficial, are not so immediate as those of the phosphate. We may say, that by the application of common lime, the food of plants is *cooked* for their use; by the phosphate, it is not only cooked, but they are excited to devour it. The better the operation of lime in all its forms is understood, the more high-

ly will it be prized and its use the more widely extended.

This theory of the nutrition of plants by voltaic agency, most happily explains the manner in which such small quantities of the salts of lime produce such astonishing effects on vegetation. Every experimental chemist knows what effect the combination of a few drops of acid with the water of his galvanic trough will have on his battery; and the application of lime to our battery of nature, when under proper circumstances, is equally effectual;—nay it does more, for the application of the acid by the chemist only excites his instrument to activity, while the lime furnished the earth by the farmer not only excites the action, but furnishes the material upon which that action can profitably be exerted. All persons acquainted with the use of lime are agreed that it produces little or no effect, except by mechanical division, only on lands that contain animal or vegetable matter that requires decomposition, a decisive proof that lime of itself does not constitute the food of the plant. But let a soil deficient in lime, and containing the food of plants, be furnished with the smallest quantity, and, unless rendered inactive by perfect dryness, or excessive moisture, its effects will be observable at once. Even the small quantity that adheres to wheat, when steeped and rolled in lime, produces a sensible effect on the vigor and rapidity of the shoot.—So too with the sulphate of lime, which, at the rate of only one or two bushels an acre, produces such an effect on many kinds of vegetation.

If our notions of vegetable nutrition are correct, all soils will be fertile that contain lime, and geine or humus, and the object of the analysis of soils will be directed to the determination of these two points. The sand and the clay present in any soil can be known without difficulty. Every farmer knows whether his soil is adhesive, retentive of moisture, or, in other words, convertible into mortar by moisture and the operations of agriculture; or whether it is dry, porous, easily parting with water, and liable to leach; and he knows too that a combination of these soils will materially benefit, and remedy the evils of both. But he has not hitherto been able to determine the best applications to give fertility to his soil, or ascertain whether the defect was the want of lime or vegetable matter; and the methods of analysis proposed by Davy, Chaptal, Beck, and others, are too complicated and nice for his purpose.

This difficulty we imagine is now in a great measure overcome, and a method of analysis discovered, by which any farmer, with little time and expense, may determine the quantity of vegetable nutriment that exists in his soils, whether it is soluble or insoluble, and whether lime is present, or requires to be applied to promote decomposition and vegetation. Dr. Dana of Massachusetts, who has long been occupied in chemical investigations, connected with manufactures and agriculture, has lately given the following directions for ascertaining the geine in the soil, and the lime. It will be seen the process is very simple, and can scarcely fail of being effectual. We quote from Prof. Hitchcock's Report:

"1. Sift the soil through a fine sieve. Take the fine part, and bake it just up to browning paper."

2. Boil 100 grains of the baked soil, with 50

grains of pearlshes, saleratus, or carbonate of soda, in 4 ounces of water, for half an hour; let it settle; decant the clear; wash the grounds with four ounces of boiling water;—throw all on a weighed filter previously dried; wash till colorless water returns. Mix all these liquors. It is a brown solution of all the soluble geine. All the sulphates have been converted into carbonates, and with all the phosphates are on the filter. Dry that, therefore, with its contents at the same heat as before. Weigh—the loss is *soluble geine*."

For the lime:—

"Replace on a funnel the filter and its earthy contents; wash with 2 drams of muriatic acid, diluted with 3 times its bulk of cold water. Wash till tasteless. The carbonate and phosphate of lime will be dissolved, the alumina scarcely touched. We may estimate all as *salts* of lime. Evaporate the muriatic solution to dryness, weigh, and dissolve in boiling water. The insoluble part will be phosphate of lime. Weigh again—the loss is sulphate of lime."

To ascertain whether the residuum contains *insoluble geine*:

"Test it by burning a small quantity on a hot shovel—if the odor of burning peat is given off, the presence of insoluble geine is indicated. *Calcine* and filter. The loss in weight will give the insoluble geine."

From the Genesee Farmer.

CULTIVATION OF FRUIT.

RASPBERRY, GOOSEBERRY, AND CURRANT.

Although these fruits are not so important as some others, they should be considered as indispensable to every fruit garden. Their early maturity, their pleasant and agreeable flavor, the certainty of the crop, and the short period of time required to bring them forward to a good bearing state, render them truly valuable.

THE RASPBERRY.

This is generally considered as much superior to the other two in flavor. Most of the varieties are propagated with great facility by transplanting the suckers, and those which do not increase by suckers, are easily propagated by layers. Of the latter, are the Early Red, and the American White, both of which are well worthy of cultivation.—The extremities of their recurved stems frequently take root spontaneously by bending over to the earth; but where this is not the case, they may be made to root with facility by making a hole in the earth with a sharp stick, thrusting in the ends of the branches, and securing them by pressing the earth about them with the foot. After one summer's growth, the newly rooted plants are detached, either in the autumn of the same year, or the succeeding spring, and will bear some fruit the first year, and plentifully the second. New varieties are raised from the seed, and will come into bearing the second year so that their quality may be determined. Bridgeman says, "Raspberry beds are in their prime about the third or fourth year; and if well managed, continue in perfection five or six years, after which they are apt to decline in growth, and the fruit to become small, so that a successive plantation should be provided in time. Select new plants from vigorous stools in full perfection as to bearing."

The soil for the raspberry should be rich and inclining to be moist. The culture is very simple; for the common varieties, consisting merely in pruning each spring, and in keeping the weeds and grass well cleaned away from around them, and the soil well cultivated. The pruning is best performed early in the spring. All dead stems should be removed, grass and weeds cut away and all the smaller shoots cut off even with the ground, leaving only from three to five of the most vigorous of the last season's growth for bearing the coming summer; these should be cut off at the top to about four-fifths of their original height, and neatly tied together. If they are slender and not sufficiently rigid to bear the future weight of leaves and fruit, they should be secured to a stake. In tying them together, they should be allowed to spread open at the top in the form of a wine glass.

There are twenty or thirty named varieties of the Raspberry, but we are able to speak from personal knowledge of but few of them. The White or Yellow Antwerp, is an excellent one of large size; for excellence it is commonly considered as standing at the head of the list; but it partakes of a slight musky flavour, hence it is considered by some as inferior to others. The Red Antwerp is highly esteemed, but is inferior to the preceding.*

THE CURRANT.

The currant is very hardy, grows freely, and almost uniformly bears very plentiful crops; the pleasant flavour of the fruit is well known, and ripening early in summer when few kinds of fruit are yet mature, it becomes very valuable.

As to soil, Loudon says, "it generally does well in any common garden-ground, well tilled and recruited: it bears the greater crop in a strong loam, or improved clay, some what moist, the earlier in a light sandy mould, which is not poor. Previous to planting the ground should be dug two feet deep."

The mode of propagating the currant is by cuttings. The shoots for this purpose are to be of the last year's production, and of vigorous, straight, and thrifty growth. Before planting, every bud is to be cut off closely except two or three near the top, to prevent too many stems growing. They should be inserted at least six or eight inches into the earth. Instead of allowing numerous shoots to spring up from each root, they should be trained to a single upright stem to the height of a foot, at which point the branches, so as to radiate on all sides, in an upward direction, should form a handsome spreading top.

Currants, on account of their hardiness, are

* These two varieties require protection in winter in the vicinity of Boston, by bending down the branches and covering them with earth; but this care is not generally need in Western N. York. The Red Cane is a good bearer and has a pleasant flavour. The White American is a very valuable one, and is probably too much neglected. The Black American or wild raspberry, (*Rubus occidentalis*) affords an excellent fruit, which probably might be much improved by cultivation. Other varieties are recommended, as the Double Bearing, Woodward's Red Globe, Red Alpine Monthly, Barnet or Cornwall's Red Prolifick Seedling, Cornish, and Brentford Red.

commonly totally neglected in culture, and are suffered to become overrun with grass and weeds, and to become crowded with suckers and numerous superfluous branches. Inferior fruit is always the result. To prevent this and increase the flavor and size of the fruit, they require proper and seasonable pruning, as well as the cultivation of the soil. The leading requisite to be observed in pruning, is to cut away all superfluous shoots, especially those of least thrifty growth, and also old, unproductive branches, so that air and light may be freely admitted, and the fruit not too much crowded upon the bushes. Neil, author of the treatise on Horticulture in the Edinburgh Encyclopedia, says that Macdonald of Dalkeith House, "raises currants of the finest quality. A good deal depends on the way in which he manages the bushes, especially during the ripening of the fruit. He prunes the bushes at the usual season of mid winter, shortening the last year's shoots down to an inch and a half.—Next summer the plants show plenty of fruit, and at the same time throw out strong shoots; as soon as the berries begin to colour, he cuts off the summer shoots to within five or six inches of the fruit. Sun and air thus get free access, and more of the vigor of the plant is directed to the fruit: the berries are found to be not only of higher flavor, but larger than usual." Kenrick says, "Mr. A. D. Williams of Roxbury, Massachusetts, practises winter pruning on perfectly similar principles; and with the most decisive results."

The Red Currant is the most highly flavored; but the White, being larger and not so sour, is by many preferred to the former. In the Catalogue of the Horticultural Society of London, are enumerated nine varieties of the red and four of the white currant. Loudon says, "the best are the Red Dutch, Knight's Large Red, Knight's Sweet Red, and Knight's Early Red. The best white currant is the White Dutch."

THE GOOSEBERRY

Is propagated by cuttings, similarly to the currant. To succeed well it should grow in very rich soil. Pruning the gooseberry is of still more importance than that of the currant. The following directions are from Bridgeman.

"The shoots retained for bearers should be left at full length, or nearly so; the first pruning should be done before the buds swell, so as not to endanger their being rubbed off in the operation. Cut out all superfluous cross shoots, and prune long ramblers and low stragglers to some well placed lateral or eye; retain a sufficiency of the young well situated laterals or terminals, to form successional bearers. In cutting out superfluous and decayed wood, be careful to retain a leading shoot at the end of a principal branch. The superfluous young laterals, on the good main branches, instead of being taken off clean, may be cut into little stubs of one or two eyes, which will send out fruit buds and spurs. Some persons, not pruning the gooseberry bush on right principles, cause it to shoot crowdedly, full of young wood in summer, from which the fruit is always small, and does not ripen freely with full flavour, on which account it is an important point in pruning, to keep the middle of the head open and clear, and to let the occasional shortening of the shoots be sparing and moderate. Between the bearing

branches, keep a regulated distance of at least six inches at the extremities, which will render them fertile bearers of good fruit."

The gooseberry is cultivated with greater ease and success in England than elsewhere; and Lindley enumerates 722 varieties, some of which have furnished specimens of single fruit weighing an ounce and a half. But nearly all the English varieties, and especially those of large size, are wholly unadapted to culture in this country on account of mildew; and neither culture, pruning, nor any other remedy has been found that can be relied on as a remedy. There are some smaller varieties, cultivated in gardens in this country, which are entirely free from it, and these alone are to be recommended here. Sufficient information however as to their names, has not been obtained for a list to be given. Some of the smaller of the English varieties, when tested in this climate, may be found worthy of cultivation.

J. J. T.

Corn Brooms—We have been presented by Messrs. Geo. Mason & Co. of Georgetown, D. C. with a corn broom, made by them, at their factory in the above city, which for neatness of finish and apparent strength, is equal to any we have seen. Messrs. M. & Co. are located on the line of the Ohio Canal; they give employment to a large number of hands, and cultivate a great number of acres of land in broom-corn. We learn that from twenty to thirty thousand dollars are yearly paid by them for labor, and the materials used by them, besides the large quantity of the latter raised by themselves, and that it is their intention to cultivate 100 acres the next season in broom corn, finding the raising of the raw material no less profitable than the manufacturing of it.—The advantages which will result to Georgetown from the successful career of these gentlemen must be immense, as all the profits of the labour employed are doubtless expended in it for household and personal supplies. Indeed, it is difficult to calculate the benefits arising to a community from an establishment of the kind located in their midst; for besides the pecuniary advantages flowing from it, the moral influence which it exerts, in turning men's minds into channels of industry, is of great intrinsic value; while it almost defies calculation, it imparts new energies; develops the latent resources of body and mind; opens new fields of enterprise, and lays the foundation of prosperity. We wish them in all sincerity entire success; for notwithstanding the Bard of Avon has it, that that which we call a rose will smell as sweet by any other name, there is something associated with the name of the *Mason's* of Virginia, which renders it peculiarly acceptable to our sense of hearing, and excites an interest in their behalf, which we are sure could not be produced

by one less honorably connected with the best days of the republic.

THE TOBACCO CROP OF 1838.

The following article from the last number of the newspaper published at the county town of Prince George's county, Maryland, (in the centre of the Tobacco region,) furnishes information which will be interesting as well to Merchants as to Planters:

FROM THE MARLBOROUGH GAZETTE, NOV. 29.

We lay before our readers a letter from a gentleman who has taken considerable pains to ascertain, as near as possible, the quantity of tobacco raised in Prince George's county. The statement accompanying the letter is not a mere speculation, but has been made up with the utmost care from the most authentic sources—the facts set forth having been gathered from the planters themselves. The report shows that in this county—where *one-third of the tobacco grown in the State of Maryland is raised—little over half a crop will be saved*; and that, too, from all we can learn, is of an inferior quality. The number of hogsheads annually raised in Maryland is from 25,000 to 30,000. Now taking this county as a criterion, we find that there will not be 11,000 hogsheads raised this year. And when it is recollected that in Charles and St. Mary's counties not more than one-third of an average crop will be made, in Calvert about one-half, and in Anne Arundel not more than one-fourth, it must be apparent to every one that, making every allowance for mistakes in the calculation, the crop of 1838 *cannot exceed* 12,000 hogsheads. This we firmly believe; and it is due to the planter that the buyers should be undeceived in regard to this matter. They believe that 20,000 hogsheads will be made in Maryland; and, influenced by this belief, are unwilling to give the worth of the article. But if it be true that the scarcity of a thing enhances its value, then tobacco must command better prices.

By the last accounts from Europe we learn that the prices have already considerably advanced, owing to the unfavorable accounts of the present crop.

We said the buyers were deceived in regard to the number of hogsheads that will be saved; and to illustrate this remark, we insert the following note, which we find appended to the Baltimore American's remarks on the state of the markets:

[As the recent advance in the price of tobacco is caused by the known deficiency of the present crop, we have ascertained from the best informed dealers in the article that the crop of Maryland tobacco raised in 1838 is estimated to be about two-thirds of an average crop, or, in round numbers, about 20,000 hhd's. The quantity of "ground leaf" saved this year is very small, not exceeding one-fourth of the usual product. The little of this description which has reached the market is held at high rates, say \$11, with very few sales.]

This is thrown out as a *feeler*; the "deficiency" is "known" to be greater by 8,000 hhd's. than is "estimated" in the above paragraph, though the writer's information may have been obtained "from the best informed dealers."

[COMMUNICATION ABOVE REFERRED TO.]

Mr. Editor: As much inquiry has been made relative to the probable crop of Tobacco made the present year, I have taken the trouble to ascertain with as much precision as possible the amount grown in Prince George's county this year, as compared with the product of 1837. This statement has been made by me from an examination in part of the warehouse books, together with actual information derived from the planters themselves, and, cannot therefore, be incorrect in any material point. I herewith send you a list containing the names of 151 of our principal planters, from which you will discover that the crop of this year grown in this county will not much exceed one-half of that of 1837. I have not had the leisure to make a similar statement for other counties, but have taken great trouble and have had the best opportunities of collecting correct and authentic information from Charles, St. Mary's, Calvert and Anne Arundel counties, and the crop of this year made in these may be put down as follows, with entire certainty of being rather under than above the true estimate: In Charles and St. Mary's one-third of an average crop, in Calvert one-half, and in Anne Arundel one-fourth of a crop, compared with the crops of the preceding year.

The list I send, you may publish in your paper, for the benefit of your readers generally, but more particularly for the benefit of some of the purchasers and dealers of tobacco in Baltimore, who seem to think that a much larger crop will be made than is represented in this list.

Yours, respectfully.

November 26, 1838.

The statement appended to the above communication contains the initials of the names of about one hundred and fifty planters, with the amount of the Tobacco Crop of each for 1837 and 1838. The aggregates of this statement are all that can be of interest to the public generally. They are as follows:

Total crop of 1837,	- -	6,692 hhd's.
Total crop of 1838,	- -	3,505 hhd's.

[From the Richmond Enquirer.]

THE SILK CULTURE.

It is with the greatest imaginable pleasure, that I perceive the columns of your paper occasionally diverted from the dreary waste of Politics, to the more genial field of Agriculture; and especially that the culture of Silk, which, like the day-star of national prosperity, has dawned on our time-honored State, meets in the Enquirer not only a welcome reception, but a fostering solicitude. You, Sir, will, I hope, live to see the day, when the reflection that you have freely given your aid to the opinion of this heretofore hidden, but rich mine of national wealth, will afford more mental satisfaction, than the most pleasing of your political retrospections. On this neutral ground, both Democrat and Federalist harmoniously meet, and cordially unite in promoting the prosperity of our common country. I trust, therefore, you will persevere in the good cause, and not be discouraged by the gloomy forebodings of more desponding or less enterprising men. Never yet has an improvement been ushered to the world, but it met open hostility or chilling neglect from some quarter. We need go no further back than the days

of Robert Fulton, to illustrate this assertion; and it is a singular historical fact, that when Henry 4th, aided by his able and indefatigable coadjutor, Oliver de Serres, was striving by every possible means to introduce the planting of Mulberries and the growing of Silk in France, the measure met with the most energetic and decided opposition from his great minister, Sully. Happily, however, the unfavorable vaticinations of the minister failed to influence the King. France now derives a revenue from this source of wealth of upwards of 150 millions of Livres. Can you not, my good Sir, say something to arouse the people of Richmond to some sensibility on this subject? Will they, possessing advantages immeasurably superior, lag behind their fellow citizens of the North? If Silk can be successfully raised any where within the limits of the United States, where is the prospect of success fairer than in Virginia. The Mulberry is indigenous to our soil—Here is emphatically the home of the *Morus Multicaulis*. Our climate is more congenial to the habits of the silk worm, than the climate of France or Italy, as the observations of M. D. Homergue and others have satisfactorily proved. Labor for the factory can be procured cheaper here, than in any State north of us. Why, then, should we hold back, while our Northern brethren are pressing forward to seize the boon Nature has so freely offered to us? Can we be insensible to the fact, that Europe offers a market worth fifty millions, and the United States twenty millions of dollars per annum for raw and manufactured silk; which, to the shame of the Anglo Saxon race, is half in the possession of Turks and Hindoos? It is a reflection on the intelligence of our State, to suppose that our English ancestors, as far back as the time of James 1st, understood our interests better than we, in this enlightened age, understand them. It is to be hoped, that the Legislature, at its next session, will follow the precedent set by the Royal edict of 16—, and stimulate the energies of the people by the offer of a small bounty for producing and reeling silk. Should the enterprising portion of the citizens of Richmond incline to invest some of their disposable funds in this lucrative business, I beg leave to call their attention to a position in the immediate vicinity of their town, unparalleled for the purpose. Belle Isle, in James River, possesses local advantages unique in themselves, and greatly transcending all other places in the Union. It has been viewed by two Northern gentlemen experienced in the Silk business, and they have unhesitatingly pronounced it far beyond any place they have seen in the United States for the purpose of raising Silk. Its advantages are, 1st, its soil, which varies from a rich, quick alluvial sand to a black and fertile mould—the first peculiarly adapted to the Nursery, and the latter to a Mulberry Orchard. 2d, its position. Presenting aspects to every point of the compass, trees growing on its warm south exposure would spring forward with the precocity of hot-bed plants; while those on its northern aspect would be more tardy—thus enabling the Silk grower to hatch his worms earlier in the Spring, and feed them later, in the Fall. This is a decided advantage, as, in ordinary situations, the culturist is compelled to retard the hatching of his worms by exposing them to the chills of an ice house, until his trees put forth

their leaves. This check on Nature is manifestly injurious, and the worms are never so strong and vigorous, as those hatched at the proper season, and consequently, more liable to disease. The high and full Southern exposure of Belle Isle removes this difficulty, by pushing forward vegetation earlier than in most places, while its equally full Northern aspect retards—thus affording tender leaves for both the first and second crop of worms. 3d—Its isolated situation, and the facility with which the proper labor could be procured from the City, and kept free from its contaminating influence. By the way, as the great advantage of the Silk business lies in the fact that it can be carried on without abstracting from other vocations their productive labor, would not the establishment of cocoeneries among us help the interest of our iron and cotton manufactories? If the wives and children of their workmen could find at home occupation suitable to their strength and ages, it appears to me that it would operate as an inducement to them to remove here, and be a strong stimulant to industry and frugality, as they would find themselves growing richer from an unlooked-for source of profit. The effect, I think, would be, to attract married artisans to Richmond, and, consulting their own interests, they would remain there.—Finally, Belle Isle possesses one advantage peculiar to itself, and of the last importance to the nurseryman and silk culturist. It is this: The vapor arising from the falls so effectually neutralises the effects of frost, that vegetation there is rarely destroyed. Even the tender and delicate fig tree flourishes without shelter through the severest Winter. The singular fact, that on this highly favored Island, the climate of the tropics exists within a latitude of 38 degrees, at once relieves the cultivator of the *Morus Multicaulis* from all solicitude as to the fate of his trees in Winter, and ensures him an early and full foliage in the spring. I will say nothing of the facility offered by the Belle Isle for the establishment of a manufactory of Silk fabrics; that will tell better a few years hence. But, take it at present for the combined purpose of a nursery and a cocoenery, and it would seem that Nature, by her mysterious working for the good of mankind, formed this place expressly to introduce the silk culture and manufacture in the Southern States.—If these crude suggestions, hastily thrown together, should contribute to arouse the good people of Richmond to some meditation on this highly interesting subject, it will be most gratifying to

A FRIEND TO THE SILK BUSINESS.

From the Lynchburg Virginian.
AGRICULTURAL.

The first annual meeting of the Red House Agricultural Society was held at the Red House, Charlotte county, on Saturday the 10th of November.

At 12 o'clock, the Society convened at the Madison Academy, where an appropriate Address was delivered by Col. Douglas B. Hancock.

The Society voted him its thanks, and requested a copy of the Address, to be filed with the papers of the Society.

The meeting then adjourned to a lot near the Academy to witness the exhibition of Stock, &c.

Premiums were awarded as follows:

To Col. D. B. Hancock, for the finest pair of Mules.

To the same, for the best two year old Colt, by imported Claret, out of a Medley mare.

To the same, for the best one year old Colt, by Macedonian, out of a Whig mare.

To the same, for the largest yield of Wheat, per acre.

To the same, for the largest growth of Turnips.

To Henry Madison, Esq. for the finest Saddle Horse.

To Clement Hancock, Esq. for the best Stallion, as a common stock Farm Horse.

To the same, for the best common Brood Mare.

To Rev. E. W. Roach, for the largest yield of Hay, per acre.

To Holcombe Watkins, Esq. for the best piece of Winter Homespun.

To Mrs. Catharine P. Wyatt, for the second best piece of Winter Homespun.

To Mrs. Ann S. Hancock, for the best Yarn Counterpane.

This being the first Show of the Society there was not that competition for premiums which was desirable. There seemed, however, to be considerable interest felt, and there was an accession of several valuable members.

We look forward to the time when the Red House Agricultural Society is to prove a great benefit to the surrounding country—when the old worn-out fields, now standing idle, covered with broom-sedge and pine saplings, will be converted into fruitful and luxuriant fields—when the Bedford, the Cheshire, the Mackey and the Berkshire hogs, and the Durham, the Devonshire, the Ayrshire, and other breeds of cattle, will take the place of our comparatively worthless kinds. And, judging from the domestic character, industry and ingenuity of the ladies of our neighborhood, we anticipate a great improvement in domestic manufactures.

BRICE A. MARTIN, Sec'y.

[From the Genesee Farmer.] MANAGEMENT OF BEES.

We some time since copied from a New York paper a notice of a quantity of Honey exhibited at the Fair of the American Institute by Messrs Wilcox and Cone of West Bloomfield. The following particulars of the management of their Bees, they have furnished in answer to a letter of inquiry, from the editor of the Vermont Chronicle:

"Our hives are of almost all descriptions commonly used, having bought many of them. We prefer the smaller sizes, such as will hold about thirty pounds when well filled, as that will be sufficient to winter a common swarm, and such hives swarm the most. We procure our honey from a box of about seven inches square, placed on the top of the hive. The box should be made very close to the hive, and no communication out of it only through the hive. The hole should not be less than three inches square. These should be put on the old hives, before the Bees begin to gather from white clover, & on the young swarms when they are first put into the hives. In this way, instead of Bees lying on the outside of the hive, idle, as they commonly do, they have room within the box, where they continue to build and gather, till they are ready to swarm. Many of

our swarms do not work on the boxes at all; but by boxing them all, we average from seven to sixteen pounds, from every old swarm. Last year we got over sixteen, it being more than a common season for honey.

We have not been troubled much with the moth; having so many hives together the birds keep them mostly subdued. We think it the best plan, to raise the hive so that the bees can just pass out all round the hive; they keep the bottom board clean of comb dust, so there is less chance for the miller to deposite their eggs, where they will not be destroyed. Care should be taken to kill all that can be found on and around the hives every day or two.

We use no means to furnish our bees with food excepting to feed some light swarms towards spring; which we do by putting comb filled with honey, in the box on the top of the hive. Bees flourish the best, where there is a plenty of Elm, Sugar Maple, and Basswood, and where the soil is natural for white clover. Elm and Maple blossom early in the spring; after spring flowers are gone Bees stir but little until white clover begins to blossom; if it fills well with honey, Bees soon fill their hives and begin to swarm; if not they swarm too late, and the swarms stand a poor chance; the Basswood and Buckwheat are the principal flowers they have to gather from. Sometimes there are honey dews which help them much.

Our box honey which is pure and free from bread, is gathered principally from Clover and Basswood blossoms.

Our hives stand in the same situation winter and summer. We are careful to have the tops secured so as to keep the snow and water out and not admit a draft of air through the hive. Every hive should have a three quarter or half inch hole from four to six inches from the bottom, in front to afford air in winter. In very cold weather frost accumulates in the hive, from the breath of the Bees, and in mild weather it melts and runs down to the hole at the bottom and freezes to ice and shuts out the air if there is no other air hole. Many bees are smothered greatly for want of this knowledge. Bees winter the best in straw hives, but do as well in summer in board or tub hives.

There is a variety of opinions on the subject of bees, owing we think, to their being so liable to change. Two swarms in the spring may stand side by side, and to appearance, be equally good; one may prosper well, the other dwindle away and die; or they may both swarm equally well, and one a few weeks after swarming be robbed; the other winter well.

Our reason for this is, that in swarming time, the Queen or Queens, if there be more than one (as there frequently is at this season of the year, but at no other,) all leave with the swarms, and leave but a few working bees and drones in the old hives; which of course, without a queen, die. Sometimes they will guard their treasure till winter, and then die, and leave their hives well filled with honey.

After swarming is over, such hives as have swarmed out, we take up as soon as they are like to be robbed and save the honey. In October we examine our young swarms, and take up all that have not nearly enough to winter on. In this way

we obtain much honey, and destroy none of our good swarms for increase.

From the New England Farmer.

"TIS DONE BY DINT OF DIGGING."

How countless the number of modern inventions
For saving of labor and other pretensions!
And yet we can no more exist without toil,
Than a lamp can keep burning without any oil.
Let us exercise all our mechanical skill:
Contrive new machines, and new theories, who will,
Yet digging, hard digging, is what brings to pass
Our thrift, and the growth of our grain and our grass.

'Tis the "sweat of the brow" that provides for our good;
It warms us with clothing,—it fills us with food:
It pays us for our pleasures,—supports us in ease,
In gay or in sober life,—just as we please.
Let genius, then, study and scheme what he can,
Still delving and digging's entailed upon man;
And, were I to give now his true definition,
I'd say, man's a digger without intermission.

Go, now, Mr. Farmer, and boast of your stock,
Your beeves and merinos, and all your fat flock,
Your famous smart gelding, without any flaw,
And tell too how Gallant and Golding can draw,
How Fillpail, and Brindle, and Bughorn you bought
Of Hilltop the grazier, and almost for naught!
Yet digging, hard digging, is what above all,
Produced these fine fatlings, the pride of your stall.

We hard-toiling husbandmen, workies and diggers,
Who never pretend to "cut any great figures,"
This truth from experience know very well,
"Who'd eat of the oyster must first break the shell."
We stick to our calling;—our home's in the fields;
We're never ashamed to put shoulder to wheels;
And if e'er annoyed by loafer or prig,
We say, "Mr. Slyboots or Lounger,—go dig."

So we dig for new systems—we dig for new plans;
For, the mind is a digger as well as the hands,
Few dig for their pleasure, more dig for their health;
But the digger of diggers, he digs for wealth.
And thus we keep digging, and follow the trade,
Till the grave-digger digs us a place to be laid;
And then, not till then, our digging and life
Come to a finale,—and thus ends the strife.

JOHN HEYDIGGER.

SILK AGENCY,

Corner of E. and 7th streets, Washington City, D. C.
The subscriber having commenced an Agency for the purchase and sale of SILK MULBERRY TREES, and all articles connected with the growing of Silk, offers for sale the following varieties of Mulberry Trees at Baltimore prices, viz. Multicaulis, Alpine, Broussa, White Italian and Canton; also Mammoth White Silk Worm's Eggs, warranted to be of superior quality. All the recent publications on silk growing for sale, and subscriptions received for the various periodicals devoted to that subject.
no 20 J. F. CALLAN.

PIGS FOR SALE.

5 boar and 2 sow pigs for sale. They were sired by Mr. R. D. Shepherd's imported boar, now in the keeping of Mr. Geo. Beltzhoover, an animal of beautiful form and fine bacon-points, and are out of a very superior Chester county sow. These pigs are now six weeks old, in fine condition, and combine the good points of dam and sire. The price is \$5 each.

The services of the boar by whom they are sired is charged at \$5 per sow.
d 11 E. P. ROBERTS,
Baltimore, Md.

MORUS MULTICAULIS TREES.

The subscriber is authorized to sell 7,000 genuine Morus Multicaulis trees, now growing in St. Augustine, Florida. They are from 8 to 14 feet high. A liberal credit will be given on the largest part of the purchase money.

He has also for sale several lots in Pennsylvania, which can be delivered in a few days to purchasers, and which he will sell on pleasing terms.
d 11 E. P. ROBERTS,
Baltimore, Md.

CHINESE MULBERRY TREES.

American Silk Agency, No. 5, Bank street, Philadelphia.

The subscriber having opened a permanent Agency for the purchase and sale of all articles connected with the culture and manufacture of Silk in the United States, offers for sale all the different varieties of MULBERRY TREES, suitable for raising the SILK WORM; viz: Morus Multicaulis Alpines, Brussa Multicaulis Seedlings, Morus Expansa, Multicaulis Cuttings, Improved Italian Trees, &c. Also, Cuttings from Norton's Virginia Seedlings, and Cunningham's Prince Edward GRAPE VINES. These vines produce an abundant crop of fruit, warranted not to rot or mildew and are fine for the table, and capable of yielding the finest wines.

S. C. CLEVELAND, Agent.

Those who may wish to enter into this profitable branch of national industry, will do well to call at the Agency, and see that they are well instructed in the value of the trees they purchase.

N. B. The particular attention of those engaged in the culture and manufacture of American Silk, whether of trees, Eggs, Cocoons, reeled or manufactured, is called to this agency. The Agent will give every attention to Sales, and prompt remittance of proceeds of any article sent to him. Those who may wish to purchase and enter in this valuable branch of home industry, can obtain from the agent every information, and also such articles as they may want without fear of deception.

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CHINESE MORUS MULTICAULIS, &c.

At the Linnæan Gardens, Flushing, New York.



50,000 splendid TREES of the genuine Morus Multicaulis are yet remaining for sale at moderate prices according to their size; and also Cuttings of the same. None of the Humburg kind are sold at this establishment. Also 20,000 trees of the splendid Morus Expansa which has very large leaves, greatly loved by the worm, it is very hardy, and yields silk of the first excellence. A great supply of the Moretta or Alpine Mulberry, the Canton, Dandole, Broussa, Asiatic, Pyramidalis, Rose of Lombardy, Morus Alata, and other varieties.

Also Fruit and Ornamental TREES, Plants and Seeds of every kind, and an immense stock of Bulbous Flower Roots, just arrived from Holland.

Silk Worms Eggs of every kind at the lowest prices, and White Italian, Canton, and Moretti or Alpine Mulberry Seeds in any quantity. The Morus Multicaulis Trees raised here have one-third more joints and buds than southern trees, and of course are worth 50 per ct. more for propagation; and the wood becomes as mature and perfect on the high exposed position our Nurseries occupy as at any place in the Union. Also, Fruit and Ornamental Trees, Bulbous Roots, Green House Plants, and Seeds of all kinds, for sale in large or small parcels.

Priced catalogues will be sent to every applicant, and orders per mail will be executed with as much precision and dispatch as if the purchasers were present, and will be packed so as to be sent to the remotest region with safety.

no 20 2m

WM. PRINCE & SONS.

SPLENDID BLOODED STOCK FOR SALE.

The proprietor of Covington farm will dispose of the following fine bulls on reasonable terms, viz.

One bull two and a half years old.

One do. six months old.

of the improved Durham short horn breed; the dam of the first was got by the celebrated bull Bolivar; for size, form and beauty they are not surpassed by any animal in the state.

Three Devon Bulls, one of which is seven years old next spring, and the largest Devon in the State. The Devons are from the stock of the late Wm. Patterson, and of undoubted purity.

Two half Devon bulls.

Two bulls half improved Durham short horn, and half Devon.

One splendid bull, a cross of the Bakewell, Alderney and Devon.

One bull, half Alderney and half Holstein.

These fine animals may be seen at Covington farm, near Petersville, Frederick county, Md. on application to James L. Hawkins, Baltimore, or to
se 11 tf

FREDERICK EBERT, Manager.

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every Monday

	PER	FROM	TO
BEANS, white field,	bushel.	1 25	—
CATTLE, on the hoof,	100lbs	9 00	10 00
CORN, yellow	bushel	75	81
White,	"	75	81
COTTON, Virginia,	pound	9	11
North Carolina,	"	9 1/2	11
Upland,	"	9 1/2	11
Louisiana — Alabama	"	11 1/2	12
FEATHERS,	pound.	45	50
FLAXSEED,	bushel.	1 12	—
FLOUR & MEAL—Best wh. wh't fam.	barrel.	10 00	10 50
Do. do. baker's,	"	8 00	—
SuperHow. st. from stores	"	7 75	7 75
" " wagon price,	"	8 00	—
City Mills, super,	"	8 25	—
" extra	"	—	—
Susquehanna,	"	—	—
Rye,	"	5 50	—
Kiln-dried Meal, in hhd.	hhd.	19 00	—
do. in bbls.	bbl.	4 00	—
GRASS SEEDS, wholcs. red Clover,	bushel.	15 00	—
Kentucky blue	"	—	—
Timothy (herds of the north)	"	3 00	—
Orchard,	"	2 00	2 50
Tall meadow Oat,	"	—	3 00
Herds, or red top,	"	90	1 00
HAY, in bulk,	ton.	12 00	16 00
HEMP, country, dew rotted,	pound.	6	7
" water rotted,	"	7	—
HOGS, on the hoof,	100lb.	7 75	8 50
Slaughtered,	"	8 00	—
HOPS—first sort,	pound.	9	—
second,	"	7	—
refuse,	"	5	—
LIME,	bushel.	32	33
MUSTARD SEED, Domestic, —; blk.	"	3 50	4 00
OATS,	"	40	42
PEAS, red eye,	bushel.	—	1 12
Black eye,	"	1 00	1 12
Lady,	"	—	—
PLASTER PARIS, in the stone, cargo,	ton.	4 50	—
Ground,	barrel.	1 50	—
PALMA CHRISTA BEAN,	bushel.	3	4
RAGS,	pound.	90	94
RYE,	bushel.	—	none
Susquehanna,	"	5 00	5 50
TOBACCO, crop, common,	100lbs	6 00	6 25
" brown and red,	"	8 00	10 00
" fine red,	"	—	—
" wrappery, suitable	"	10 00	20 00
for segars,	"	8 00	10 00
" yellow and red,	"	8 00	12 00
" good yellow,	"	12 00	16 00
" fine yellow,	"	6 00	—
Seconds, as in quality,	"	5 00	8 00
" ground leaf,	"	4 50	6 00
Virginia,	"	5 00	8 00
Rappahannock,	"	1 75	1 82
Kentucky,	"	1 70	1 75
WHEAT, white,	bushel.	1 70	1 75
Red, best	"	1 70	1 75
Maryland	"	41	43
WHISKEY, 1st pf. in bbls. }	gallon.	43	—
" in hhd. }	"	43	—
" wagon price, }	bbls.	40	—
WAGON FREIGHTS, to Pittsburgh,	100lbs	2 00	—
To Wheeling,	"	2 25	—
Wool, Prime & Saxon Fleeces,	pound.	50 to 55	—
Full Merino,	"	45 50	—
Three fourths Merino,	"	40 45	—
One half do. }	"	35 40	—
Common & one fourth Meri. }	"	35 40	—
Pulled,	"	30 33	—
POTATOES, 60 to 70 cts. a bushel.			

A HALF DURHAM COW FOR SALE.

The subscriber has for sale a beautiful fashionable roan half Durham Cow. She is fresh in milk and only 4 years old. Her price is \$75. Applications, post-paid, to be made to

ED. P. ROBERTS.

Who has also for sale several full bred Devons, males and females.

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,	barrel.	—	—
BACON, hams, new, Balt. cured,	pound.	15	—
Shoulders, do.	"	13	—
Middlings, do.	"	13	—
Assorted, country,	"	13	—
BUTTER, printed, in lbs. & half lbs.	"	31	37 1/2
Roll,	"	25	31 1/2
CIDER,	barrel.	1 75	2 00
CALVES, three to six weeks old,	each.	5 00	6 00
Cows, new milch,	"	25 00	40 00
Dry,	"	12 00	15 00
CORN MEAL, for family use,	100lbs.	1 75	—
CHOP RYE,	"	1 50	1 60
EGGS,	dozen.	12 1/2	—
FISH, Shad, No. 1, Susquehanna,	barrel.	9 75	10 00
No. 2,	"	9 50	—
Herrings, salted, No. 1,	"	5 75	—
Mackerel, No. 1, — No. 2	"	12 50	—
No. 3,	"	—	7 25
Cod, salted,	cwt.	3 25	3 37
LARD,	pound.	14	15

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

		VIRGINIA.
U. S. Bank,	par	Farmers Bank of Virgi. par
Branch at Baltimore,	do	Bank of Virginia,
Other Branches,	do	Branch at Fredericksburg, do
MARYLAND.		Petersburg,
Banks in Baltimore,	do	Norfolk,
Hagerstown,	do	Winchester,
Frederick,	do	Lynchburg,
Westminster,	do	Danville,
Farmers' Bank of Mary'd, do	do	Bank of Valley, Winch. par
Do. payable at Easton,	do	Branch at Romney,
Salisbury,	1 per ct. dis.	Do. Charlestown, par
Cumberland,	par	Do. Leesburg,
Millington,	do	Wheeling Banks,
DISTRICT.		Ohio Banks, generally 3
Washington,	do	New Jersey Banks gen. 3
Georgetown, } Banks, 1 p. c.		New York City,
Alexandria,	do	New York State,
PENNSYLVANIA.		Massachusetts,
Philadelphia,	par	Connecticut,
Chambersburg,	1/2	New Hampshire,
Gettysburg,	1/2	Maine,
Pittsburg,	2 1/2	Rhode Island,
York,	1/2	North Carolina,
Other Pennsylvania Bks. 2		South Carolina,
Delaware [under \$5]	4	Georgia,
Do. [over 5]	1 1/2	New Orleans,
Michigan Banks,	10	Canadian do.
Canadian do.	10	

FARMERS' REPOSITORY
OF AGRICULTURAL IMPLEMENTS AND EASTMAN'S CYLINDRICAL STRAW CUTTERS
IMPROVED.

THE Subscriber informs the public that he has secured by letters patent his late and very important improvements on his Cylindrical Straw Cutter, by which improvements they are made more durable and easier kept in order. All the machinery being secured to an iron frame the shrinkage, wear and decay of wood is avoided. The feeding part of his improved machine is upon an entire different principle from the former machine; far more durable, requiring neither skill or care to keep it in order. These machines are so constructed as to make the freight on them less than half what it cost to ship the former or wood machines, an important desideratum to purchasers living at a distance; and I now offer it to the public upon the credit of my establishment as the most perfect machine in existence for the same purpose. They are also adapted to cutting rags for paper making, and for cutting tobacco as manufactured by Tobacconists, &c.

I also keep these machines on hand made as heretofore with my new feeding machinery attached to them; and also a general assortment of Agricultural Implements, as usual. Elliott's Horizontal Wheat Fans, and Fox & Borden's Threshing Machines are both superior articles.

My stock of Ploughs on hand are not equalled in the city either for quality, quantity, or variety. I have a

large assortment of Plough Castings at retail or by the ton, and having an Iron Foundry attached to my establishment can furnish any kind of Plough or Machine Castings on reasonable terms and at a short notice.

All repairs done with punctuality and neatness. On hand, a few Patent Lime Spreaders, Horse Powers, &c. &c.

Also just received, a fresh supply of Landreth's superior Garden Seeds. In store, superior Timothy and Orchard Grass Seed and Seed Oats. All implements in the agricultural line will be furnished by the subscriber, as good and on as reasonable terms as can be had in this city, with a liberal deduction to wholesale purchasers. Likewise will receive orders for Fruit Trees from Mr. S. Reeves' Nursery, New Jersey.

JONATHAN S. EASTMAN,

Pratt street, Baltimore,

Feb 20

Between Charles & Hanover sts.

FOR SALE,

A valuable FARM of prime soil, on the Western Run in Baltimore county, about two miles north west of the 14th mile stone of the Baltimore and York turnpike road, and at the same distance from the depot of the Baltimore and Susquehanna rail road, at Cockey's tavern, in a rich, highly cultivated and healthy tract of country.

This farm contains from 260 to 270 acres, having a full proportion in wood, much of which is building timber, peculiarly valuable in that neighborhood; is in the best state of cultivation; a considerable part in productive timothy meadow, and the residue of the arable land, not in grain, is well set in clover, the whole under good fencing, laid off into convenient fields, each of which is well watered. The farm has a large quarry of excellent building stone. There are on the premises an apple orchard of select fruit trees, which seldom fail to bear abundantly; a valuable mill seat on the Western Run, with a race already dug. There is no location in the country more favorable for a grist mill, having the advantage of a rich and thickly settled neighborhood, and a good public road leading thence to the turnpike road. Buildings substantial and convenient, being a STONE DWELLING, and kitchen of two stories; a large stone Swiss barn, with cedar roof and extensive stabling below; large hay house and stable for cattle; stone milk house near the dwelling, with a spring of fine never failing water, with other out-houses. On the country road near the mill-seat a good house and shop for a mechanic, under rent to a good tenant. It is well known the lands on the Western Run are in every respect equal, if not superior to any in the county. Adjoining or near are the lands of Col. N. Bosley, Daniel Bosley, Thos. Matthews and others. The water power, with about 20 acres of land, is so situated that they may be detached and sold separately, without injury to the rest of the farm for agricultural purposes. Terms of sale will be liberal. Apply to

NATHANIEL CHILDS,

on the premises, or to

WILLIAM J. WARD,

oc 23 tf

Fayette, near Calvert st. Baltimore.

TO THE PUBLIC.

Try the New Agricultural Establishment in Grant-street, next door to Dinsmore and Kyle.

Every article warranted to be first rate. The subscribers, grateful for past favors, take this early opportunity of returning their thanks to their customers and the public in general, and beg leave to inform them that they are now provided with a very extensive stock of newly manufactured AGRICULTURAL IMPLEMENTS, suitable to meet the call of Farmers, Gardeners, Merchants, Captains of vessels, and others, viz: 1000 Ploughs, assorted sizes, from \$4 to \$15 each, comprising of the old common Bar Shear, Winand's Self Sharpener; Woods & Freeborn's patent, all sizes, "Davis," "Sinclair & Moore's" improved Hill Side Ploughs, highly esteemed for turning the furrow down hill, with wrought or cast shears; Wheat Fans, of various sizes and patterns, from \$15 to \$50 each, warranted to separate the garlic from the wheat; Corn Shellers, from \$12 to \$20; Cutting Boxes, from \$7 to \$50 each; Corn and Tobacco Cultivators, large and small; Expanding do., Wheat Cradles warranted to have fingers of the natural growth, and Grass Scythes, &c. &c.; Castings, of all descriptions and patterns, by the lb. or ton, to suit customers, allowing a liberal discount to merchants buying to sell again—all of which will be furnished on the most pleasing terms and every article warranted to be of the best quality, in proportion to the cost price. All orders by mail or otherwise shall be duly attended to with the greatest despatch.

THE FARMER & GARDENER.

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, E. P. ROBERTS AND SAMUEL SANDS—EDITED BY E. P. ROBERTS.

No. 34.

BALTIMORE, MD. DEC. 18, 1838.

Vol. V.

— THIS publication is the *successor* of the late **AMERICAN FARMER** and is published at the office, at the N. W. corner of Baltimore and North streets, over the Patriot office, at two DOLLARS AND FIFTY CENTS per annum, if paid within one month from the time of subscribing, or \$3 if after that time. All letters to be postpaid.

BALTIMORE: TUESDAY, DEC. 18, 1838.

ROBERTS' SILK MANUAL.

This work will be issued from the press in all this week. Persons desirous of obtaining copies of it will do well to make early application, as a large number of the edition is already engaged.

Price per single copy, 37½ cts.—to dealers who take 100 copies or more, a deduction of 33½ per cent. discount will be made; to those who take a less number, 20 per ct. will be allowed—terms, *cash*.—It will contain about 100 large octavo pages.

THE NATIONAL SILK GROWERS' CONVENTION.

This body, which met in our city on the 11th inst. adjourned on Thursday last, after a session of three days. And we should not do justice to our own feelings, nor respond to those so universally expressed by others, were we not to say, that a more dignified body of men never convened in any city, on any occasion. Among them were to be found, ministers of the gospel—judges of the courts of justice—those who had represented their states in the national councils of the nation—members of the bar—physicians—farmers, planters, machinists, manufacturers and mechanics—and among them too, were to be seen many practical men who have been for years engaged in the business of fabricating silk—those who may be proudly called the pioneers in that holy work, the advancement of whose interest formed the object of the Convention's meeting—In the generous spirit which animated its members—in the singleness of purpose which distinguished their proceedings, and in the wisdom of their acts, we think we can behold the sure guarantees of the entire and triumphant success of the silk culture. The doings of the Convention, we are proud to declare, were characterised by the sole wish of subserving the *public* interest—and that all private and sinister motives were kept out of

view—the aged and the young were each and all animated by the same patriotic impulse, that of advocating the cause of the Silk culture, as a great national object.

In another part of this day's paper will be found their proceedings, to which we respectfully beg leave to refer the reader.

— The rejoinder of Messrs. William Prince and Sons, will appear in our next.

We take great pleasure in inserting a communication in our columns to-day, descriptive of *Highfield Cocoonery*, about to be established at Germantown, Pennsylvania, and ask for it the attentive perusal of our readers. The motives which have induced its proprietor to establish it, are no less honorable to his head than they are to his heart. It is not often that we see our young gentlemen of education and wealth, devoting their time, talents, and means, in the furtherance of objects connected with the *industry* of the country; but we trust that in future, those instances will not be so rare, and that the *example* now so laudably set, will serve to give a new direction to their *sources of pleasure, and objects of enterprise*; for assuredly there cannot be a more lofty incentive offered to the youth of our country, than that which is presented by an appropriation of a portion of their patrimony, in the creation of institutions calculated to give employment to the poor, to increase individual wealth, and to add to that of the nation.

From a sense of delicacy to the gentleman, we shall not name him in this notice; but this we will say, that this act of enlightened patriotism will endear him to all, and especially to those of his countrymen who were familiar with the virtues, and revered the distinguished eminence, attained by his illustrious father.

SALES OF CATTLE AND HOGS IN KENTUCKY.

In connection with this subject we learn from that excellent agricultural paper, the Franklin Farmer, of the 8th inst. the following facts:

Henry Clay, Jr. Esq. of Fayette county, Ky. recently sold his improved Durham short-horn cow *Princess*, to Messrs. John & Richard Allen, of the same county, for \$2000.

Wm. P. Curd, Esq. of Fayette county, purchased of Mr. John R. Bryant, of the Society of Shakers, Pleasant Hills, Mercer county, Ky. a few days ago, a pair of Berkshire hogs, for which he paid \$500.

Thos. H. Clay, Esq. purchased at Mr. Thomas Smith's sale, two weeks since, near Lexington, the improved short-horn Durham calf *Grosvenor*, 2 years old, for \$700.

Kirkpatrick, was sold at the same time to Messrs. Wm. Lewis & Willey, for \$600; he was the property of Messrs. Offutt & Washington.

The Kentuckians know the value of good stock, and have the liberality to reward the enterprise of those who import and raise them!! The cause of agriculture must prosper under the fostering care of such a people!!

For the Farmer and Gardener.

HIGHFIELD COCOONERY.

That part of the community who feel interested upon the subject of silk growing in the United States, are respectfully invited to visit the above establishment during the summer of 1839. It is probably as large, if not larger, than any other cocoonery in Pennsylvania, and constructed upon the most approved plan, situated on very elevated land in Germantown, Penn. 6½ miles from Philadelphia; it commands one of the most extensive and beautiful inland views in the vicinity of this city.

Letters addressed to the Proprietor of Highfield Cocoonery, Germantown, Pa. containing *important* information relative to any of the branches of the silk growing and reeling arts, will be thankfully received and filed for the inspection of visitors. Patentees of all kinds of machinery for reeling and manufacturing silk, for cutting the leaves, for hurdles, &c., and others who have not patented their inventions, are invited to deposit one or more of their machines at the above establishment, where they shall be taken good care of, exhibited free of any charge, and orders forwarded to their owners for such as may be desired by visitors, or promptly returned whenever called for.

All varieties of silk worm eggs, or mulberry trees, if only ten or a dozen, will be thankfully received and carefully propagated. Should the machinery deposited warrant the expense, it is intended to put up a small steam engine upon an entire new plan, combining great simplicity, power, and very little bulk, for the purpose of propelling it; the Piedmontese reel, recommended by the Convention of delegates from all parts of the union assembled at Baltimore, Dec. 11th, 1838, shall be procured and put in motion, if possible to be had; and also Gay's celebrated machinery for manufacturing sewing and other silks.

The proprietor expects to have a very large number of the genuine *Morus Multicaulis* trees for sale next summer, and upon as long credit as may be desired, provided good security be given for payment at such time as may be agreed upon; and as he is perfectly independent as regards his own pecuniary means, he hopes that patriotism and an ardent desire to promote the culture of silk in the United States will be conceded to influence him, at least as much as self-interest. Therefore let not the poor man fear repulse when asking for a few trees on a reasonable credit; all the security asked of such will be his own note—provided he can show from respectable neighbors and friends satisfactory testimonials of honesty, sobriety and industry.

Germantown, Dec. 15th, 1838.

[Editors favorable to the silk culture are requested to give this an insertion.—*Ed. Farmer and Gardener*]

NATIONAL SILK CONVENTION.

Tuesday, December 11th, 1838.

The Delegates appointed to attend the Convention of Silk Growers and Culturists, assembled in the Grand Lodge room at the Mosonic Hall at ten o'clock. There were one hundred and seventy-five delegates in attendance, comprising a body of highly respectable and intelligent Citizens, and representing eleven States and the District of Columbia.

Judge COMSTOCK, of Connecticut, was called to the chair, and Dr. C. C. Cox, of Baltimore, and J. F. CALLAN of Washington, appointed Secretaries.

On motion, it was resolved, that all persons present from different parts of the United States friendly to the objects of this Convention, and not duly appointed delegates, be invited to take seats in this Convention.

On motion it was Resolved, that the States be called in order, and the names of the delegates from each be reported to the Secretaries.

The names of the delegates having been recorded, it was found that there were one hundred and seventy-five in attendance.

Dr. Buck, of Washington, then moved that the Convention adjourn to meet in the City of Washington.

Upon this motion a debate ensued, in which Messrs. Buck, Gummere, Kinsman, Olmsted, Hopper, Clarke, Thompson, Ellis, Henry, and McClean participated.—The motion was then postponed.

On motion, it was resolved, that a committee to consist of one from each State be appointed to nominate permanent officers to the Convention.

The committee, after having retired for consultation, reported the following persons as officers of the Convention:—

President.

Judge COMSTOCK, of Connecticut.

Vice Presidents.

Samuel Whitmarsh, of Massachusetts.

E. A. Russell, of Connecticut.

J. H. King, of New York.

Dr. Green, of New Jersey.

Saml. D. Ingham, of Pennsylvania.

Dr. Naudain, of Delaware.

Judge Eccleston, of Maryland.

Michael Nourse, of District of Columbia.

James Winslow, of Virginia.

James Duncan, of Ohio.

J. Adams, of Georgia.

Treasurer.

L. J. Cox, of Baltimore.

Secretaries.

Dr. C. C. Cox, of Baltimore.

J. F. Callan, of Washington.

J. H. Pleasants, of Va.

George Gaskell.

T. C. Gould, of Pa.

On motion, it was resolved that a committee be appointed to report the order of proceedings of the Convention.

The Convention then adjourned until 7 o'clock P. M.

Pursuant to adjournment, the Convention assembled at 7 o'clock, P. M. Additional names were handed in of members of the Convention, after which,

The Committee appointed to report the order of proceedings submitted the following resolutions, which, after some amendments, were adopted:

1. *Resolved*, That it is expedient to form a *National Silk Society*, and that a committee of five members be appointed to draft and report a constitution for the same.

Committee on this resolution, Messrs. Gummere, Cobb, Thompson, Buck, and McClean.

2. *Resolved*, That a committee of three be appointed to draft an address to the People of the United States on the culture of Silk.

Committee, Messrs. Smith, Gibbons, and Gummere.

3. *Resolved*, That a committee of three practical men be appointed to recommend the best Silk Reel for the United States, and that the committee be requested to give their reasons for their preference.

Committee, Messrs. Whitmarsh, Smith and Cobb.

The motion to adjourn the session of the Convention to Washington was then called up by Mr. McClean, and after some discussion was rejected.

Mr. Olmstead, of Conn. was added to the committee on business.

On motion it was resolved, that a committee of three be appointed to prepare rules of order for the Convention.

Committee, Messrs. Kinsman, Naudain and Pleasants.

The Convention then adjourned until to-morrow at eleven o'clock.

December 12, 1838.

The Convention having again assembled, the committee appointed to prepare rules of order, made a report, which was adopted.

The committee appointed to draft a Constitu-

tion for a National Silk Society made a report, which, after being amended, was adopted.

Many resolutions were offered and laid on the table, after which the Convention adjourned to meet at 7 o'clock P. M. in order that an opportunity might be afforded the members during the afternoon to form the National Society.

AMERICAN SILK SOCIETY.

At half past three o'clock P. M. the members of the Convention having assembled for the purpose of forming the proposed Association, it was

Resolved, That a committee of one from each State represented, be appointed a committee to report officers for the American Silk Society.

The Society then adjourned to re-assemble at half past six P. M.

The Society having again met at the hour above named, the committee reported the following officers:

President.

Dr. ARNOLD NAUDAIN.

Vice Presidents.

Judge Comstock, of Conn.

Judge Hopper, of Md.

Sam'l Whitmarsh, of Mass.

James Winston, of Va.

Phil. Physic, of Pa.

J. F. Callan, of D. C.

Dr. Geo. Green, of N. J.

Treasurer.

J. O. Law, of Md.

Corresponding Secretary.

Gideon B. Smith, of Md.

Recording Secretary.

Dr. C. C. Cox, of Md.

Executive Committee.

L. J. Cox,

Mr. Gummere,

J. Kinsman,

G. R. Garretson,

Dr. Wm. Gibbons,

J. S. Skinner,

Dr. Howard,

Thos. S. Pleasants,

John Mason.

The President and corresponding Secretary, are members *Ex-officio*.

On motion of Mr. Thompson, it was

Resolved, That any properly organised Silk Company, or Association, may claim a perpetual membership in the American Silk Society, by the payment of \$20 into the Treasury in advance, and shall be entitled to two representatives in the annual meeting of the Society.

The Society then adjourned until 9 o'clock on Thursday morning, to give way to the Convention.

NATIONAL SILK CONVENTION.

Baltimore, December 12, 1838.

The Convention having assembled at 7 o'clock P. M. the special order was called up, being the following resolution offered by Dr. Thompson.

Resolved, That it is the deliberate opinion of this Convention that *Silk* may be grown in all the United States, not only for domestic purposes, but as a valuable article of commercial export—thereby giving active employment to American labor, and retaining millions of dollars in our country, that are annually sent out of it for the purchase of Silken goods.

The presentation of the above resolution elicited much interesting information from Messrs. Cobb, of Mass., Smith, of Md., Comstock, Olmstead, Whitmarsh, and many others; after which the Convention adjourned.

December 13, 1838.

SILK SOCIETY.

The American Silk Society convened at 9 A. M.

Dr. Thompson, of Del. offered the following resolution:—

Resolved, That a National Silk Journal ought to be established under the auspices of the Executive Committee, and all the funds over and above the support of said paper ought to be devoted to the advancement of the Silk cause in the U. States.

Mr. Gummere, of New Jersey, offered the following resolution:—

Resolved, That it be recommended to the friends of the Silk cause to take the necessary means for organising State Societies, auxiliary to the American Silk Society, which shall be represented therein by delegates.

Mr. Snyder, of Penna. offered the following:—

Resolved, That it be recommended to the Executive Committee to offer such premium as they may think in accordance with the funds of the Society, to encourage the culture and manufacture of Silk, and that this be done at an early day.

The hour having arrived for the meeting of the Convention, the Society adjourned to 3½ P. M.

THE CONVENTION.

The Convention assembled at 10 A. M.

The report of the Committee on Reels was made and laid on the table.

The following resolutions were offered and adopted:—

By Mr. McClean, of New Jersey:

Whereas, the committee appointed to recommend the best reel for the people of the United States have made a report, recommending the Piedmontese reel as combining the principles necessary to produce a perfect and convenient article, therefore—

Resolved, That the Convention recommend said reel or any other combining its essential principles and proportions to the Silk growers of the U. States, and that the Executive Committee of the American Silk Society be requested to communicate to the public, in such way as they see proper, the importance and necessity of adopting said reel.

By Dr. Gibbons, of Delaware:—

Resolved, That the Convention recommend to those who are cultivating the mulberry tree for market, to turn their attention to the production

of silk, by which they will not only increase their own gain, but eminently subserve the interests of their country by diffusing a knowledge of this highly important branch of national industry, and exhibiting practical and demonstrable evidence of the profits to be derived therefrom.

Dr. Gibbons prefaced his resolutions by some appropriate remarks, during which he exhibited a calculation of the profits of the Silk culture, &c. which was ordered to be recorded on the journal.

Mr. McClean also read a statement showing the results of the experiment of raising Silk on a sixteenth of an acre, planted with the *Morus Multicaulis*. It was also ordered to be recorded.

Dr. C. C. Cox, of Md. presented a translation of the Observations of a French Gentleman on the subject of trees, worms, &c. which was referred to the special attention of the Executive Committee.

The following resolutions were then offered and adopted.

By Mr. Gummere of N. Jersey,

Resolved, That it be recommended to the friends of the silk culture in the several States, where no laws for the purpose now exist, to endeavor to procure the passage of acts to encourage this branch of industry.

By Mr. Skinner, of Md.

Resolved, That the thanks of this Convention be and they are hereby tendered to the several gentlemen who have favored it with a view of specimens of cocoons and of American silk, both raw and manufactured, and with their observations, the result of their researches and experience on the great objects for which this Convention was assembled.

By Mr. Smith, of Md.

Resolved, That the members of this Convention from the several States and the District of Columbia, be requested to apply to their several legislatures for such legal enactments as shall protect the plantations of mulberry trees from depredation, and make stealing or carrying away of mulberry trees by trespassers an act of felony.

By Mr. Winston, of Va.

Resolved, That the respective State delegations composing this Convention, upon their return to their constituents, be requested to call a meeting of the same, and of others friendly to the silk cause, and lay before them such information as they may have collected.

Resolved, That the respective delegations, at the meetings proposed to be called by the foregoing resolution, propose the formation of State Societies, auxiliary to the National Society, and of County Societies auxiliary to the State Societies.

By Dr. Thompson, of Delaware,

Resolved, That the thanks of this Convention are due, and they are hereby tendered, to all the pioneers and promoters of the silk culture in the United States; and that to Gideon B. Smith of Baltimore great merit attaches for his untiring zeal and devoted exertions in diffusing much useful knowledge connected with the subject.

By Mr. Sangston, of Md.

Resolved, That the proceedings of this convention be published in pamphlet form, in such num-

ber, that each and every society represented in this Convention shall be furnished with one or more numbers of said proceedings, and that a committee of three be appointed to carry the resolution into effect.

Committee, Messrs. C. C. Cox, G. B. Smith and Henry Mankin, of Md.

Resolved, That this Convention recommend to the different States and Territories to choose delegates to meet in convention, upon the subject of promoting the culture of silk in our country, in the city of Washington, on the second Tuesday after the first Monday in December, 1839.

By Mr. Kinsman, of Pennsylvania,

Resolved, That the thanks of this Convention are hereby tendered to the delegates from the city and county of Baltimore, for the superior arrangements made by them for our accommodation—and also to the citizens of Baltimore for the cordial reception and courtesy which we have individually received at their hands, since our arrival in this place.

Resolved, That the thanks of this Convention be tendered to the President, Vice Presidents and Secretaries, for the able and impartial manner in which they have respectively discharged their duties.

The Convention then adjourned *sine die*.

AMERICAN SILK SOCIETY.

The Society having convened at half past 3, P. M., Dr. Gibbons, of Delaware, offered the following resolution, which was adopted:

Resolved, That in the judgment of this Society, there are no occupations that promise more to ameliorate the moral and physical condition of a large portion of our population, and to elevate them in the scale of intellectual and moral worth, than those involved in the culture of silk. Poor children, indigent females, the lame and infirm of both sexes, and all ages, will find in this branch of industry employment lucrative, healthy and moral. That the philanthropic and humane, with those of the clerical and learned professions, in promoting by their influence and example, the culture of silk, will add another to the many already existing evidences of their devotion to the best interests of our people, and will deserve the thanks of their fellow-citizens and of this Society.

By Mr. Kinsman, of Pennsylvania:

Resolved, That the Executive Committee are hereby instructed to take measures to procure the formation of State Societies, and that they have authority to elect to the office of Vice President, each President of a State Society, if in their judgment they shall deem it expedient before the next annual meeting.

By Dr. Cox, of Maryland:

Resolved, That the Executive Committee be requested to prepare an abstract of the proceedings of the Convention and of the Society, to be presented to both houses of Congress.

Resolved, That when this society adjourns, it adjourn to meet in the city of Washington on the 2d Wednesday after the first Monday in December, 1839.

The Society then adjourned.

CONSTITUTION

OF

THE AMERICAN SILK SOCIETY.

Article 1st. This society shall be called "THE AMERICAN SILK SOCIETY," the object of which shall be to promote the production and manufacture of silk in the *United States*.

Article 2d. Any member of this convention, and any other person approved of by the Executive Committee hereinafter provided for, may become a member of this society by signing this constitution, or by signifying his wish to the Corresponding Secretary, and by paying into the treasury any sum not less than one dollar, and the same annually; and ten dollars paid at the time of subscription will constitute a member for life.

Moreover, any properly organized Silk Company or association may claim a perpetual membership in the "American Silk Society" by the payment of \$20 into the treasury in advance, and shall be entitled to two representatives in the annual meeting.

Article 3d. The society shall meet annually at such time and place as a majority of the members present shall appoint.

Article 4th. The officers of this society shall be a President, Vice Presidents, a Recording and Corresponding Secretary, a Treasurer, and an Executive Committee, to consist of the President, Corresponding Secretary, and nine members, of whom three shall constitute a quorum, who shall be elected annually.

Article 5th. It shall be the duty of the President to preside at the meetings of the society, to perform the duties assigned to such office, and to deliver an address before the society on its great objects and interests, at the meeting succeeding that one at which he was appointed. In the absence of the President, the oldest Vice President shall preside until a President is appointed.

Article 6th. The Recording Secretary shall keep the books and papers of the society, and shall record its proceedings.

Article 7th. It shall be the duty of the Corresponding Secretary to conduct the correspondence of the society, and cause to be published such papers and documents as the Executive Committee shall direct.

Article 8th. The Treasurer shall take charge of the funds of the society, and pay them out on the order of the Executive Committee. He shall also receive and dispose for exhibition all specimens of machinery or of silk produced for premium or exhibition, and shall furnish his account annually.

Article 9th. It shall be the duty of the Executive Committee to devise and execute plans for the promotion of the interests of the society; shall have power to fill all vacancies in their own body; shall make an annual report of their proceedings; shall recommend measures for the adoption of the society; and shall award premiums and medals under the regulations of the society.

Article 10th. The Society may elect any number of honorary members, who may meet and deliberate, but not vote with the society.

Article 11th. Not less than 27 members shall constitute a quorum for the transaction of business at any regular meeting.

Article 12th. This constitution may be altered or amended by a vote of two-thirds of the members present, on a recommendation of the Executive Committee requesting such alteration or amendment.

From the Yankee Farmer.

We have a work by Professor Anderson, of Edinburgh, which contains very valuable matter to the agriculturist on the subject of quicklime and other calcareous substances as a manure. It embraces in a small space a great deal of practical information, and though the subject is treated in a scientific manner, yet it is perspicuous and may be easily understood by farmers. As it is very scarce, its republication in the Farmer will be interesting and new to the most of our readers. We shall frequently make short selections from this work till we have published all that relates to agriculture.

QUICK-LIME

AND OTHER CALCAREOUS SUBSTANCES
AS A MANURE.

The first idea that occurs in reflection on this subject, is that all substances in which calcareous matter is contained, have been successfully employed as a manure, at different times, and in different places.

Thus—*lime, marl* of all sorts, *chalk, limestone gravel, shelly sand*, or pure *shells* of every denomination, have all been employed as manures, with the greatest success.

And as all these, excepting lime, always contain the calcareous matter in its *mild* state, we are led to conclude that they operate on the soil merely as *calcareous*, and not as *saline* substances.

Lime, indeed, is sometimes applied to the soil in its caustic state, as it comes fresh from being slaked; but more commonly at some considerable distance of time after it has been burnt. However, as burning is the only mode usually employed for reducing lime-stone to powder, and thus preparing it for a manure, the opinion in general prevails, that calcination is as necessary for rendering lime capable of becoming a manure, as for making it fit to be employed as a cement.

It is however, of importance to the practical farmer, to be informed that this is not the case. Mr. DuHamel, was the first, who, from an accidental experiment, was led to believe that *powdered lime-stone* was a manure equally efficacious with lime itself. He recorded the experiment as a great discovery.

Having had occasion to dress a marble chimney-piece, for repairing one of his country houses, the mason chose a lawn near the house, as the most convenient place for hewing the stone. After the operation was finished, all the large chips were picked up and carried away, that they might not disfigure the lawn; but the fine powder that had been ground off by the action of the chisel, mixed so intimately with the grass that it could not be gathered up. In consequence of this very fall dressing of powdered limestone, the grass afterwards grew upon that spot with much greater luxuriance than on any other part of the lawn, and always continued to have a much livelier verdure.

From hence, he, with good reason, concluded, that powdered lime-stone might be employed as a

manure with success. To try if this would always be the case, he repeated the experiment several times, by causing some limestone to be pounded on purpose; and found that it never failed to promote the fertility of the spot on which he applied it, in a very high degree.

I chose to relate this experiment at large, for the satisfaction of those who may be unacquainted with the physical cause of the difference between lime and lime-stone. To such as are fully apprised of this, a little reasoning might have been sufficient to afford a certain conviction, that the result of the experiment must have been what Mr. Du Hamel found it.

Lime is no sooner slaked, than it immediately begins to absorb its air, and return to its former mild state; or, in other words, it becomes *effete*, in which state it possesses the same chemical qualities, in every respect as lime-stone.

If this be spread out thinly upon the surface of the earth, it absorbs its air in a very short time. A few hours, in this situation, restores a large proportion of its air; and in a day or two, at most, it becomes perfectly *effete*, as masons experience when they sweep together the scattered particles that have lain round their heaps of lime, and attempt to use it in mortar by itself, for it is then no more coherent than sand, for moistened earth.

Hence, then, it must follow, that in every case, lime is converted into the same state with lime-stone, in a few days after it is mixed with the soil; so that if it produces any effect at all as lime, as a saline substance,—it must only be at the *very first*, when it is applied; and it must ever afterwards act merely as powdered lime-stone.

But it is well known, that lime produces scarcely any sensible effect as a manure at the beginning. Even the first year after it is applied to the soil, its effects are inconsiderable, in comparison of what it produces in the second and succeeding years. From whence we must conclude, that it operates upon the soil, merely as a mild calcareous earth, and that its calcination is of no farther utility in preparing it for manure, than as a cheap and efficacious method of reducing the lime-stone to a fine powder.

It is of importance, that these facts should be generally known; because it may sometimes happen, that good lime-stone shall be found in places where fuel could not be obtained for burning it; in which case, such lime-stone could be of no use to the farmer, if calcination were absolutely necessary. But, seeing this is not the case, lime-stone, even in these situations, may be converted into a most beneficial manure, if a stream of water can be commanded, sufficient for driving a mill, for reducing the stone to powder.

I have seen the model of a mill that had been invented for that purpose, which was constructed on the same principles with an ordinary gunpowder mill. It had several large massy stampers, composed of huge blocks of cast-iron, that were successfully lifted up and let fall by a wheel that caught their handles, and, after a proper time, slipped them again as it revolved round its axis. These stampers fell with great force upon the lime-stone, that had been previously broken into pieces of a moderate size, and placed in a strong trough, formed for that purpose. Through this trough, a small stream of water was conveyed, which washed away with it, the small pieces of lime-

stone, as they were successfully reduced to powder by the stampers. This stream of water was received into a large reservoir, in which it was allowed to stagnate, and deposit, as a sediment, the lime-stone powder it brought along with it; the pure water flowing gently over a part of the brim, which was made lower for that purpose.

From the Genesee Farmer.

THE GRAIN WORM.

We give it up. Desirous as we have been to believe, or rather to hope the grain worm ceased to injure the berry of the wheat as soon as it became hard, and that consequently, the idea of its eating after the grain was harvested was erroneous, facts have convinced us that the worm does not cease to feed on the kernel until its transformation or its death. Some of these facts and our experiments we shall mention here. We have before alluded to confining some worms in wheat in a glass vial. They were so confined a month; when the wheat was examined some of the kernels had been plainly eaten, but most of the worms were dead. The vial with its contents was again put away for fifteen days, and then examined. The worms were dead, but that they feed to the last is evident from the kernels now lying before us, some of them nearly half devoured; while others have been but just commenced upon. Every kernel was selected singly and perfectly sound, for the experiment. The fact therefore is undeniable, *that the worm does feed on the ripened berry*. We have also since harvest selected ears of wheat in the field, containing the worm, and which bore evident traces of having the kernels fed upon since maturing; and ears taken from the mow, containing worms, have not unfrequently kernels exhibiting the same appearance. Some of these worms we enclosed in a vial of flour. After being in it a month, the contents were examined, and every one was found dead; a conclusive proof that they are different from the weevil or the common flour worm, with which some have confounded them.

We have this summer been making some observations on the fly that produces the worm, and its method of operating; but fortunately for us, our opportunities for noticing the fly were not as favorable as last year, as they were much fewer in number on the wheat. After much attention to the matter, we are inclined to the opinion that there are at least two varieties of the fly that infest wheat, both belonging to the genus *Cecidomyia* of Latreille, the *Tipula* of Linnæus. This is not improbable, when it is recollected there are a great number of known species of this insect; upwards of thirty having been found in England alone. One of these species, a reddish or changeable green fly, we have detected depositing its young on wheat, and on some kinds of ripe berries, as the common blackberry. It is furnished with an ovipositor that folds under his belly; and is used for penetrating beneath the chaff of the wheat. The other would seem to be the *Cecidomyia palustris* of Wilson, its *white* halteres and *flesh red* abdomen with a retractile ovipositor, corresponding exactly with his delineation. This we think is the common insect, the parent of the worm most commonly found in wheat, barley or oats, (we have seen the fly in all) and which is so

destructive at the present time. The appearance of the worms themselves would indicate a parentage not in all cases the same, and we have observed that part of them attach themselves to any object with which they come in contact, and if disturbed, secure themselves from falling by a thread, like the worms found in clover heads sometimes, which indeed this kind of the worms very much resemble.

Some difference of opinion exists among observers, whether the product of the fly is oviparous or viviparous; whether an egg is deposited which produces the worm, or whether the worm, already vivified in the body of the parent, is placed on the kernel. As the examples of young produced in both these ways, we may refer to the Genus *Musca* of Linn, of which, one species, the *Musca vomitoria*, or green fly, deposits an egg, from which the maggot is produced, while the *Musca carnaria* deposits its own living larvæ (the young having been hatched in the body of the mother) on any place deemed suitable for their residence. In the first case the egg, after the escape of the larvæ, always remains; in the latter case none is ever seen. In repeated examinations with an excellent microscope, we have never been able to detect the least appearance of a covering from which the larvæ, had escaped; and though ears of wheat have been examined on which the fly was caught in the act of depositing its egg or young, the product was always living, and though exceedingly minute, able to move and crawl. The legitimate inference, therefore, would seem to be, that the worm is viviparous, or deposited in the living state by the parent.—The fact is of some importance in determining the best means of effecting their destruction, as limewater or the fumes of brimstone, while they would produce no effect on an egg, would be fatal to the young larvæ; and it was regretted that the question could be determined no more satisfactorily.

Some observers of the wheat or grain worm, have contended that the young larvæ did not penetrate the kernel of the grain but produced the injury by pressure of the grain, and an abstraction of the juices necessary to bring it to perfection. The latter is the case, but the abstraction is clearly made by the perforation of the kernels. In examining infected ears of wheat, after carefully removing the covering of the berry, a small whitish spot may be seen on the grain. Submitting this to the microscope, it will be seen that the whitish mass is the small particles of exuviae thrown out around the insect, in the centre of which a small opening may be discovered most generally occupied by the head of the larvæ, which is thus occupied in feeding on the milk of the berry, and deriving his subsistence at the expense of the grain. Those who have examined green peas, when the pod and pea were occupied by the larvæ of the pea bug, can have an idea of the appearance of a wheat kernel in the earliest stages of the attack of the wheat worm. That the worm does from the first penetrate the berry, and feed on its vital juices cannot admit of a doubt.

The propriety of threshing wheat as soon as harvested when infested by the worm, is obvious; since, as after the berry becomes hard, the worm is at large in the chaff, and threshing and cleaning frees the wheat or other grain from their presence and their rapacity. Personal observation and in-

quiry in almost every county of the Western District of this state since the past harvest, has shown us that the worm has spread over the whole of it with the exception of a small part of the southern tier of counties. There we were assured the worm had not yet been seen, and the same exemption is enjoyed in the northern counties of Pennsylvania; while the great wheat growing counties of that state, to the south, have this year been greatly infested. That the grain worm is destined to overrun the country seems clear; how seriously, or for how long a time its presence is to be felt, time alone can determine.

Mr. Severance—Sir—After much study and many experiments, I have made a discovery which I think will, with that encouragement it merits, be of great importance to the people of this State and all others similarly situated.

In 1832 I was strongly impressed that flour might be obtained from the potatoe. Accordingly I ventured an experiment, the result of which was eight pounds of flour from the bushel. I then suspended my experiments until the last winter, when I resumed them and found the result to be the same as in 1832, i. e., eight pounds of fine flour from the bushel. Owing to a deficiency of gluten, good bread cannot be made from it alone, but when mixed with equal parts of wheaten flour, the bread made from it is much better than that which is made from all wheaten flour—that is, in the estimation of those that have eaten the bread.

Two hundred bushels of potatoes per acre is called by the Farmers an average crop in Maine, yielding according to the above stated experiments, eight barrels of flour to the acre.

Yours respectfully,

AFEL ABBOTT.

Sidney, March 19, 1833.

If you think the above worthy a place in your paper, please to insert it.

[We certainly do. If eight barrels of flour can be obtained from an acre of potatoes, it will be equal to forty bushels of wheat to the acre, and the residuum of the potatoes, after taking out the starch which composes the flour, will of course be of considerable value in feeding cattle, hogs, &c. The potatoe crop scarcely ever fails in Maine. So then we have a certain and abundant supply of breadstuffs always within our reach, and need only a little diligence and forecast to secure it.

Kennebec Journal.]

PUMPKINS, SQUASHES, &c.—Every farmer knows how easy it is, in a favorable season, to raise pumpkins, and that they are of much value in fattening cattle, feeding milch cows and feeding hogs, if boiled with potatoes; besides their use in cookery for the table. For culinary purposes, however, they are very far inferior to squashes, and the latter have the advantage of keeping as sound as a nut for months after a pumpkin will rot. The marrow squash grows as large as the pumpkin, is cultivated as easily, and, with skilful cookery, can be made an important article of subsistence. Its taste resembles that of the sweet potato, is equally as palatable, and almost as nutritious. Pies made from it are A No. 1. Abundance of the seed can be had in this town, (Augusta, Maine.) Those who have raised them this year should save all the seeds, as they will be better than seeds raised

another year, when the fruit may not ripen so well. Seeds of the squash and pumpkin kind are said to be better after they are several years old if they are kept dry. They should be planted at a considerable distance from other vines, and in the richest and warmest soil.

Since writing the above, we have conversed with a farmer on Sandy river, who has the produce of a quarter of an acre in these squashes, and considers them of great value in fattening his hogs.

P. S. The big French squash or pumpkin raised by R. Partridge, in this town, weighing one hundred and twenty-six pounds, has been opened. This great squash, although it is of good flavor, is not so fine grained nor so rich in quality as the marrow squash, nor is it equal to the crook neck, the Valparaiso, or the Cuba squash, but its great size may make it an object to cultivate it.—*Kennebec Journal*.

HEDGES.—OSAGE ORANGE.

It is gratifying to be assured that, in one of our native plants, namely, the *maclura*, or Osage orange, we are likely to realize this desirable object. The *maclura* is a delicious tree, growing indigenously in Arkansas and Louisiana; is perfectly hardy in this latitude, and even as far as Boston. For a number of years it has been cultivated in the grounds of a few private gentlemen and in some of the large nurseries. It is only recently, however, that its value has been appreciated, or any pains taken to propagate it extensively. In its native region, it attains to the size of a tree of the second or third class; but in this latitude it is very moderate, seldom rising to the height of fifteen feet. Its greatest merit consists in the spreading manner of its growth, the denseness of its branches, and the armature with which they are furnished. Planted in hedge rows, the *maclura* would never become unmanageable on account of its size; at the same time, its growth is sufficiently vigorous to make a fence in three, four, or, at the most, five years, from the seed. It may be asserted with safety that, on land of tolerable fertility, the labor and expense of perfecting a system of hedges would not be greater than to keep our ordinary enclosures in good order for the time required to construct them. When completed, this heavy item in every farmer's account would thenceforth be expunged.

The *maclura* is readily raised from the seed. Unlike those of the thorn, they require no preparation; on the contrary, they vegetate, with certainty, in two or three weeks after planting. Under tolerable care, the seedlings will grow two feet or more the first season; after which they are fit to be removed from the nursery rows to the place designed for the hedge. I raised a number of plants the past year from seeds, the produce of a tree growing in my garden, now eight or nine years old.

For an individual to engage in the business in earnest, it would be best for him to obtain the seed from the Southwest rather than to purchase the plants from a nurseryman. A few dollars would procure enough of the former, and pay all the expenses of the transportation, to set a long line of hedge. The preferable mode would be to have them brought in the berries, from which

they might afterwards be picked without much trouble. Fifty berries would yield at least a pound of seed, and a pound contains from 8,000 to 10,000 grains. It is the practice to place the sets from twelve to fifteen inches apart, in a single row. These facts will enable any person to form a correct judgment of the number necessary to plant any given length of hedge.

[*Farmers' Register*.]

COLUMBIAN HORTICULTURAL SOCIETY.—Although, at this "dread season of the year," the beauties of Flora's kingdom are generally veiled in the gloom of winter, horticultural science will occasionally present to public inspection and admiration something new, wonderful, and lovely. It is gratifying to the friends of the Columbian Horticultural Society—whom we believe to be numerous, and to the Public generally, who are satisfied, we firmly believe, that the Society has been of great practical value to the District and the adjacent counties—to find that our professional florists continue to exhibit some of their choicest beauties at the stated meetings of the Columbian Horticultural Society. And we sincerely hope that this association may continue to thrive, and put forth new blossoms every spring, and bear new fruit every autumn, so as to render it not only an advantage, but an honor to the District.

The following is the official report of the last stated meeting of the Society, which was held at the City Hall last Saturday, pursuant to public notice:

COLUMBIAN HORTICULTURAL SOCIETY,

DECEMBER 8, 1838.

At the meeting this day, Mr. WILLIAM BUIST exhibited—

A fine flower of the *Streitzia Regina*.

Specimens of ten varieties of Tea Roses, exceedingly beautiful and finely flavored.

A fine plant of *Cactus Truncata*, in splendid bloom.

W. B. MAGRUDER, Rec. Sec'y.

CULTURE OF SILK.

The successful experiments in the different parts of the union have been so great that no doubt can exist as to the practicability of its culture in this state. Indeed we have seen a few skeins manufactured by a young lady of Ann Arbor (whose name, we are sorry to say, we have forgotten,) which, if we are at all a judge, is a beautiful specimen of what may be done, and we think it cannot be surpassed in any part of the Union. As it is in contemplation by several gentlemen of our state to enter into the culture of silk, and it being our design to furnish valuable information on all subjects which may tend to increase their profit, we have solicited and obtained from a gentleman of this city who has been successfully engaged in the business a series of articles upon the rearing of silk worms and the manufacture of silk, which we shall place before our readers at as early a date as possible.

Would it not be of much advantage to the cause, and a source of much benefit to the community at large, for our State legislature to grant a premium of—cents upon each pound of silk manufactured in the State? The inducement for the home

manufacture of this article will then be increased and prosecuted with more vigor by those who have, or are about to launch their all in the experiment. Farmers may readily engage in the business without any expense, save the price of a few mulberry trees and 3 or 4000 worms. With this exception it costs nothing, and after the first year the culture of silk may be considered as clear gain; in many instances farmers have been known to derive more from the sale of their silk than from the produce of their farms. Indeed, the farmer who has one or more industrious daughters need not be at any trouble himself, as the occupation is a pleasing one, and can occupy the leisure moments of his children.—*Michigan Agriculturist*.

AVERIL'S PATENT HORTICULTURAL HOE.

Among the newly invented implements for horticultural purposes we consider the above hoe one of the best which has been constructed for extracting weeds between rows of peas, beets, &c. Having used this implement ourselves, we can recommend it as superior to any other for the purposes for which it is intended. It consists simply, of a piece of steel about one inch and a half wide, shaped like a flint, elongated into a sharp point with ribbed back, forming an edge on either side, which may be used at pleasure.

Michigan Agriculturist.

THE FAMER'S SONG.

Away with grandeur, pomp, and gold,
Away with childish ease,
Give me but strength my plough to hold,
And I'll find means to please.

'Tis sweet to toil for those we love—
My wife and darling boys;
Both tend to make my labour prove,
The sweetness of my joys.

The sweetest morsel I procure,
When labour makes it sweet,
Is eaten with a taste more pure
Than meats that monarchs eat.

'Tis mine—yes, 'tis my happy lot,
From cares and av'rice free,
To own but this secluded cot,
Sweet friends and liberty.

Thus I no monarch on his throne
Can grudge his destiny,
Let him his weight of cares bemoan,
Whilst I am truly free.

When labor wearies, and grows dull,
I take my book or gun,
Thus I the sweetest pleasure cull,
And thus all sorrow shun.

Now tell me all ye gouty train,
Who have what fortune gives,
Is not the cheerful country swain
The happiest man that lives?

THE AMERICAN FARMER.

The proprietors of this paper have a few complete sets of this work on hand, which they will dispose of at the reduced price of \$50 a set.

SPRING CLOVER SEED,

Just received and for sale, by

R. SINCLAIR, Jr. & CO.

oct. 16

BARHAMVILLE INSTITUTE,

With 10,000 Morus Multicaulis Trees, for sale.

The establishment now offered for sale, is called Barhamville. It is beautifully and eligibly situated about 2 miles from Columbia, (the capital of S. C.) in a region of country termed the Sand-Hills. The grounds comprehend between 500 and 600 acres; they are well timbered, (chiefly pine and small oak); about one half consist of what is termed bottoms, rendered perfectly dry and tillable, by at least 6000 yards of ditching, most of which measures 5 feet in width by 3½ in depth. There are upwards of 70 acres completely ditched, now ready for being broken up, which I value at \$50 per acre.

The Institute buildings are situated upon a high range of Sand-Hills, proverbial for health, inasmuch that the neighborhood affords a retreat for many of the families of Columbia during the summer months. It was on that account that the site was selected for the business (a female Boarding School) to which the buildings have been dedicated. The water is excellent, supplied by two pumps—besides which there are two excellent springs.

The centre building is of wood, well plastered, and neatly finished throughout, and measures 54 feet square, three stories high; the upper room or attic story being 15 feet in height. Beneath this building is an excellent cellar, above ground. The wings attached to the centre building are 100 feet each in length, the one 24 and the other 34 feet in width. The southern wing is of brick, well plastered, two stories high, well finished throughout, having an excellent cellar above ground. The northern wing, recently built, is of wood, ceiled throughout. It is three stories high, with an attic story equal in its area and superior in its height to the three lower stories. The basement story of this wing is of brick.

A mahogany spiral stair-case of superior workmanship, which with other improvements attached, cost upwards of \$2500, ascends throughout the centre building.

From the extremity of the brick wing, and at a right angle with it, proceeds a building, (the academic edifice) 134 feet in length by 34 feet in width, two stories high, well ceiled throughout, and having an excellent cellar above ground.

Besides fire-places, the whole establishment, with the exception of the brick building, is warmed by air-furnaces, on the most improved plan, similar to that by which Grace Church and many public and private edifices in Philadelphia are warmed.

The expense of erecting the apparatus, &c. amounted to upwards of \$2500.

The area of all the floors in these buildings, is, by measurement, upwards of 100 000 square feet. On the Institute buildings is an insurance for \$15,000.

There are also, at a small remove from the main buildings, two residences, cottage-built, neatly finished; the one containing 4, and the other, 2 rooms.

Within 300 yards of the Institute, on an eminence, is the mansion built by me for the late John La Taste, repurchased by me from his family. This is a highly improved residence. The house stands upon brick pillars about 5 1-2 feet from the ground; the four lower and two upper rooms being well finished; out-houses, &c. in good order.

It is unnecessary to say, that the out-buildings of the institute are, in every respect, correspondent to the main building. The garden has been improved at a considerable expense.

With the above establishment, every way fitted for an extensive Silk Factory, may be had 10,000 Morus Multicaulis trees, 500 of which are 6 years old, all of vigorous growth, which, at the present time, will yield upwards of 200,000 cuttings; they are now regularly planted, 12 feet by 12. 100,000 cuttings, of two and three eyes each, are now being set out, well secured from frost by a ground dressing of long manure.

When the intrinsic value and resources of the above establishment are taken into consideration, and when it is recollected that in one year, from the present time, Columbia will be connected with Charleston by a rail-road, now in a vigorous state of progression; when it is, furthermore, recollected, that this rail road is to connect the sea-board with the great north-west, it may be said that the property now offered for sale, presents inducements to individuals or companies, desirous of embarking extensively in the Silk business, unsurpassed by any thing offered in this country.

The buildings, collectively, cost upwards of \$60,000, and the lands, with the improvements bestowed upon

them, will command at auction \$25 per acre, and, as it respects the value of the trees, an estimate can be easily made by reference to the prices they are now commanding in the Northern and Middle states.

I will sell the above at two-thirds of the original cost, on the following terms: one-third cash, and the remaining two-thirds payable in one and two years, with interest from time of sale, mortgage and approved security and policy of insurance assigned.

ELIAS MARKS, M. D.

Barhamville, near Columbia, S. C.

I will dispose of 100,000 cuttings (or 200,000 eyes) each cutting to consist of 2 or 3 eyes, hermetically sealed at each end with a composition of beeswax and rosin. Price 2½ cts. per eye, delivered in Columbia. E. M. de 18 6t

SILK AGENCY,

Corner of E. and 7th streets, Washington City, D. C.

The subscriber having commenced an Agency for the purchase and sale of SILK MULBERRY TREES, and all articles connected with the growing of Silk, offers for sale the following varieties of Mulberry Trees at Baltimore prices, viz. Multicaulis, Alpine, Broussa, White Italian and Canton; also Mammoth White Silk Worm's Eggs, warranted to be of superior quality. All the recent publications on silk growing for sale, and subscriptions received for the various periodicals devoted to that subject. no 20 J. F. CALLAN.

PIGS FOR SALE.

5 boar and 2 sow pigs for sale. They were sired by Mr. R. D. Shepherd's imported boar, now in the keeping of Mr. Geo. Beltzhoover, an animal of beautiful form and fine bacon-points, and are out of a very superior Chester county sow. These pigs are now six weeks old, in fine condition, and combine the good points of dam and sire. The price is \$5 each.

The services of the boar by whom they are sired is charged at \$5 per sow. E. P. ROBERTS, d 11 Baltimore, Md.

TO THE PUBLIC.

Try the New Agricultural Establishment in Grant-street, next door to Dinsmore and Kyle.

Every article warranted to be first rate. The subscribers, grateful for past favors, take this early opportunity of returning their thanks to their customers and the public in general, and beg leave to inform them that they are now provided with a very extensive stock of newly manufactured AGRICULTURAL IMPLEMENTS, suitable to meet the call of Farmers, Gardeners, Merchants, Captains of vessels, and others, viz: 1000 Ploughs, assorted sizes, from \$4 to \$15 each, comprising of the old common Bar Shear, Winand's Self Sharpener; Woods & Freeborn's patent, all sizes, "Davis," "Sinclair & Moore's" improved Hill Side Ploughs, highly esteemed for turning the furrow down hill, with wrought or cast shears; Wheat Fans, of various sizes and patterns, from \$15 to \$50 each, warranted to separate the garlic from the wheat; Corn Shellers, from \$12 to \$20; Cutting Boxes, from \$7 to \$50 each; Corn and Tobacco Cultivators, large and small; Expanding do., Wheat Cradles warranted to have fingers of the natural growth, and Grass Scythes, &c. &c.; Castings, of all descriptions and patterns, by the lb. or ton, to suit customers, allowing a liberal discount to merchants buying to sell again—all of which will be furnished on the most pleasing terms and every article warranted to be of the best quality, in proportion to the cost price. All orders by mail or otherwise shall be duly attended to with the greatest despatch.

We would particularly call the attention of Country Merchants and others, wishing to purchase agricultural implements to sell again, to the fact, that we will furnish them with articles on better terms than they can be supplied at any other establishment in the city. Our assortment is complete and as varied as that of the most extensive concern in Baltimore.

We have also connected in its operations with the above branch of business a complete assortment of FIELD AND GARDEN SEEDS, kept by Thomas Denny—Also Garden and Farm Tools, of various sorts and of the choicest collection, which will enable our customers to have filled entire all orders in the Agricultural and Seed Departments. mh 26 JOHN T. DURDING & Co.

CHINESE MORUS MULTICAULIS, &c.

At the Linnaean Gardens, Flushing, New York.



50,000 splendid TREES of the genuine Morus Multicaulis are yet remaining for sale at moderate prices according to their size; and also Cuttings of the same. None of the *Humbig* kind are sold at this establishment. Also 20,000 trees of the splendid Morus Expansa which has very large leaves, greatly loved by the worm, it is very

hardy, and yields silk of the first excellence. A great supply of the Moretta or Alpine Mulberry, the Canton, Dandole, Broussa, Asiatic, Pyramidalis, Rose of Lombardy, Morus Alata, and other varieties.

Also Fruit and Ornamental TREES, Plants and Seeds of every kind, and an immense stock of Bulbous Flower Roots, just arrived from Holland.

Silk Worms Eggs of every kind at the lowest prices, and White Italian, Canton, and Moretti or Alpine Mulberry Seeds in any quantity. The Morus Multicaulis Trees cultivated in our nurseries are remarkable for the closeness of their joints, and furnish about 50 per ct. more buds for propagation than trees raised far to the south; the wood also becomes as mature and perfect on the high exposed position our Nurseries occupy as in any part of the Union. Also, Fruit and Ornamental Trees, Bulbous Roots, Green House Plants, and Seeds of all kinds, for sale in large or small parcels.

Priced catalogues will be sent to every applicant, and orders per mail will be executed with as much precision and dispatch as if the purchasers were present, and will be packed so as to be sent to the remotest region with safety.

no 20 2m

WM. PRINCE & SONS.

CHINESE MULBERRY TREES.

American Silk Agency, No. 95, Walnut st. Philadelphia.

The subscriber having opened a permanent Agency for the purchase and sale of all articles connected with the culture and manufacture of Silk in the United States, offers for sale all the different varieties of MULBERRY TREES, suitable for raising the SILK WORM; viz: Morus Multicaulis Alpinese, Brussa Multicaulis Seedlings, Morus Expansa, Multicaulis Cuttings, Improved Italian Trees, &c. Also, Cuttings from Norton's Virginia Seedlings, and Cunningham's Prince Edward GRAPE VINES. These vines produce an abundant crop of fruit, warranted not to rot or mildew and are fine for the table, and capable of yielding the finest wines.

S. C. CLEVELAND, Agent.

N. B. The particular attention of those engaged in the culture and manufacture of American Silk, whether of trees, Eggs, Cocoons, reeled or manufactured, is called to this agency. The Agent will give every attention to Sales, and prompt remittance of proceeds of any article sent to him. Those who may wish to purchase and enter in this valuable branch of home industry, can obtain from the agent every information, and also such articles as they may want without fear of deception.

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SPLENDID BLOODED STOCK FOR SALE.

The proprietor of Covington farm will dispose of the following fine bulls on reasonable terms, viz.

One bull two and a half years old.

One do. six months old.

of the improved Durham short horn breed; the dam of the first was got by the celebrated bull Bolivar; for size, form and beauty they are not surpassed by any animal in the state.

Three Devon Bulls, one of which is seven years old next spring, and the largest Devon in the State. The Devons are from the stock of the late Wm. Patterson, and of undoubted purity.

Two half Devon bulls.

Two bulls half improved Durham short horn, and half Devon.

One splendid bull, a cross of the Bakewell, Alderney and Devon.

One bull, half Alderney and half Holstein.

These fine animals may be seen at Covington farm, near Petersburg, Frederick county, Md. on application to James L. Hawkins, Baltimore, or to

no 11 f

FREDERICK EBERT, Manager.

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every Monday

	PER	FROM	TO
BEANS, white field,.....	bushel.	1 25	—
CATTLE, or the hoof,.....	100lbs	9 00	10 00
CORN, yellow.....	bushel	75	81
White.....	“	75	81
COTTON, Virginia,.....	pound	9	11
North Carolina,.....	“	9 1/2	11
Upland,.....	“	9 1/2	11
Louisiana — Alabama.....	“	11 1/2	12
FEATHERS,.....	pound.	45	50
FLAXSEED,.....	bushel.	1 12	—
FLOUR & MEAL—Best wh. wh't fam.	barrel.	10 00	10 50
Do. do. baker's.....	“	—	—
SuperHow. st. from stores	“	8 00	—
“ wagon price,.....	“	7 75	7 75
City Mills, super.....	“	8 00	—
“ extra.....	“	8.25	—
Susquehanna,.....	“	—	—
Rye,.....	“	5 50	—
Kiln-dried Meal, in hhds.	hhd.	19 00	—
do. in bbls.	bbl.	4 00	—
GRASS SEEDS, wholes. red Clover,	bushel.	15 00	—
Kentucky blue.....	“	—	—
Timothy (herds of the north)	“	3 00	—
Orchard,.....	“	2 00	2 50
Tall meadow Oat,.....	“	—	3 00
Herds, or red top,.....	“	90	1 00
HAY, in bulk,.....	ton.	12 00	16 00
HEMP, country, dew rotted,.....	pound.	6	7
“ water rotted,.....	“	7	—
HOGS, on the hoof,.....	100lb.	7 75	8 50
Slaughtered,.....	“	8 00	—
HOPS—first sort,.....	pound.	9	—
second,.....	“	7	—
refuse,.....	“	5	—
LIME,.....	bushel.	32	33
MUSTARD SEED, Domestic, —; blk.	“	3 50	4 00
OATS,.....	“	40	42
PEAS, red eye,.....	bushel.	—	1 12
Black eye,.....	“	1 00	1 12
Lady,.....	“	—	—
PLASTER PARIS, in the stone, cargo,	ton.	4 50	—
Ground,.....	barrel.	1 50	—
PALMA CHRISTA BEAN,.....	bushel.	—	—
RAGS,.....	pound.	3	4
RYE,.....	bushel.	90	94
Susquehanna,.....	“	—	—
TOBACCO, crop, common,.....	100lbs	5 00	5 50
“ brown and red,.....	“	6 00	6 25
“ fine red,.....	“	8 00	10 00
“ wrappery, suitable.....	“	—	—
“ for segars,.....	“	10 00	20 00
“ yellow and red,.....	“	8 00	10 00
“ good yellow,.....	“	8 00	12 00
“ fine yellow,.....	“	12 00	16 00
Seconds, as in quality, ..	“	6 00	—
“ ground leaf,.....	“	5 00	8 00
Virginia,.....	“	4 50	6 00
Rappahannock,.....	“	—	—
Kentucky,.....	“	5 00	8 00
WHEAT, white,.....	bushel.	1 75	1 82
Red, best.....	“	1 70	1 75
Maryland.....	“	1 70	1 72
WHISKEY, 1st pf. in bbls.....	gallon.	41	43
“ in hhds.....	“	43	—
“ wagon price,.....	“	—	40
WAGON FREIGHTS, to Pittsburgh, ..	100lbs	2 00	—
To Wheeling,.....	“	2 25	—
Wool, Prime & Saxon Fleeces,...	pound.	50 to 55	—
Full Merino,.....	“	45 50	—
Three fourths Merino,.....	“	40 45	—
One half do.....	“	35 40	—
Common & one fourth Meri.	“	35 40	—
Pulled,.....	“	30 33	—
POTATOES, 60 to 70 cts. a bushel.	—	—	—

A HALF DURHAM COW FOR SALE.
The subscriber has for sale a beautiful fashionable roan half Durham Cow. She is fresh in milk and only 4 years old. Her price is \$75. Applications, post-paid, to be made to ED. P. ROBERTS.
Who has also for sale several full bred Devons, males and females.
oc 2 4t

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,.....	barrel.	—	—
BACON, hams, new, Balt. cured....	pound.	15	—
Shoulders,..... do.....	“	13	—
Middlings,..... do.....	“	13	—
Assorted, country,.....	“	13	—
BUTTER, printed, in lbs. & half lbs.	“	31	37 1/2
Roll,.....	“	25	31 1/2
CIDER,.....	barrel.	1 75	2 00
CALVES, three to six weeks old....	each.	5 00	6 00
Cows, new milch,.....	“	25 00	40 00
Dry,.....	“	12 00	15 00
CORN MEAL, for family use,.....	100lbs.	1 75	—
CHOP RYE,.....	“	1 50	1 60
EGGS,.....	dozen.	12 1/2	—
FISH, Shad, No. 1, Susquehanna, ..	barrel.	9 75	10 00
No. 2,.....	“	9 50	—
Herrings, salted, No. 1,.....	“	5 75	—
Mackerel, No. 1, ——— No. 2	“	12 50	—
No. 3,.....	“	—	7 25
Cod, salted,.....	cwt.	3 25	3 37
LARD,.....	pound.	14	15

BANK NOTE TABLE.
Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

U. S. Bank,.....	par	VIRGINIA.
Branch at Baltimore,.....	do	Farmers Bank of Virgi. p
Other Branches,.....	do	Bank of Virginia,.....
MARYLAND.		Branch at Fredericksburg,
Banks in Baltimore,.....	par	Petersburg,.....
Hagerstown,.....	o	Norfolk,.....
Frederick,.....	do	Winchester,.....
Westminster,.....	do	Lynchburg,.....
Farmers' Bank of Mary'd, do	do	Danville,.....
Do. payable at Easton,.....	do	Bank of Valley, Winch. p
Salisbury,.... 1 per ct. dis.	do	Branch at Romney, ..
Cumberland,.....	par	Do. Charlestown, ..
Millington,.....	do	Do. Leesburg,...
DISTRICT.		Wheeling Banks,....
Washington,.....	do	Ohio Banks, generally
Georgetown,.....	} Banks, $\frac{1}{4}$ p.c.	New Jersey Banks gen.
Alexandria,.....		New York City,.....
PENNSYLVANIA.		New York State,.... do
Philadelphia,.....	par	Massachusetts,..... 1
Chambersburg,.....	$\frac{1}{2}$	Connecticut,..... 1
Gettysburg,.....	do	New Hampshire,..... 1
Pittsburg,.....	2 $\frac{1}{2}$	Maine,..... 1
York,.....	$\frac{1}{2}$	Rhode Island,..... 1
Other Pennsylvania Bks. 2	do	North Carolina,.... 3a
Delaware [under \$5].... 4	do	South Carolina,.... 4
Do. [over 5]..... 1 $\frac{1}{2}$	do	Georgia,..... 5a
Michigan Banks,.....	10	New Orleans,..... 7
Canadian do.....	10	

FARMERS' REPOSITORY OF AGRICULTURAL IMPLEMENTS AND EASTMAN'S CYLINDRICAL STRAW CUTTERS IMPROVED.

THE Subscriber informs the public that he has secured by letters patent his late and very important improvements on his Cylindrical Straw Cutter, by which improvements they are made more durable and easier kept in order. All the machinery being secured to an iron frame the shrinkage, wear and decay of wood is avoided. The feeding part of his improved machine is upon an entire different principle from the former machine; far more durable, requiring neither skill or care to keep it in order. These machines are so constructed as to make the freight on them less than half what it cost to ship the former or wood machines, an important desideratum to purchasers living at a distance; and I now offer it to the public upon the credit of my establishment as the most perfect machine in existence for the same purpose. They are also adapted to cutting rags for paper making, and for cutting tobacco as manufactured by Tobaccoists, &c.

I also keep these machines on hand made as heretofore with my new feeding machinery attached to them; and also a general assortment of Agricultural Implements, as usual. Elliott's Horizontal Wheat Fans, and Fox & Borsland's Threshing Machines are both superior articles.

My stock of Ploughs on hand are not equalled in the city either for quality, quantity, or variety. I have a

large assortment of Plough Castings at retail or by the ton, and having an Iron Foundry attached to my establishment can furnish any kind of Plough or Machine Castings on reasonable terms and at a short notice.

All repairs done with punctuality and neatness. On hand, a few Patent Lime Spreaders, Horse Powers, &c. &c. Also just received, a fresh supply of Landreth's superior Garden Seeds. In store, superior Timothy and Orchard Grass Seed and Seed Oats. All implements in the agricultural line will be furnished by the subscriber, as good and on as reasonable terms as can be had in this city, with a liberal deduction to wholesale purchasers. Likewise will receive orders for Fruit Trees from Mr. S. Reeves' Nursery, New Jersey.

JONATHAN S. EASTMAN,
Pratt street, Baltimore,
feb 20 Between Charles & Hanover sts.

FOR SALE,
A valuable FARM of prime soil, on the Western Run in Baltimore county, about two miles north west of the 14th mile stone of the Baltimore and York turnpike road, and at the same distance from the depot of the Baltimore and Susquehanna rail road, at Cockey's tavern, in a rich, highly cultivated and healthy tract of country.

This farm contains from 260 to 270 acres, having a full proportion in wood, much of which is building timber, peculiarly valuable in that neighborhood; is in the best state of cultivation; a considerable part in productive timothy meadow, and the residue of the arable land, not in grain, is well set in clover, the whole under good fencing, laid off into convenient fields, each of which is well watered. The farm has a large quarry of excellent building stone. There are on the premises an apple orchard of select fruit trees, which seldom fail to bear abundantly; a valuable mill seat on the Western Run, with a race already dug. There is no location in the country more favorable for a grist mill, having the advantage of a rich and thickly settled neighborhood, and a good public road leading thence to the turnpike road. Buildings substantial and convenient, being a STONE DWELLING, and kitchen of two stories; a large stone Switzer barn, with cedar roof and extensive stabling below; large hay house and stable for cattle; stone milk house near the dwelling, with a spring of fine never failing water, with other out-houses. On the country road near the mill-seat a good house and shop for a mechanic, under rent to a good tenant. It is well known the lands on the Western Run are in every respect equal, if not superior to any in the county. Adjoining or near are the lands of Col. N. Bosley, Daniel Bosley, Thos. Matthews and others. The water power, with about 20 acres of land, is so situated that they may be detached and sold separately, without injury to the rest of the farm for agricultural purposes. Terms of sale will be liberal. Apply to

NATHANIEL CHILDS,
on the premises, or to
WILLIAM J. WARD,
oc 23 tf Fayette, near Calvert st. Baltimore.

MORUS MULTICAULIS TREES.
The subscriber is authorized to sell 7,000 genuine Morus Multicaulis trees, now growing in St. Augustine, Florida. They are from 8 to 14 feet high. A liberal credit will be given on the largest part of the purchase money.

He has also for sale several lots in Pennsylvania, which can be delivered in a few days to purchasers, and which he will sell on pleasing terms. E. P. ROBERTS,
d 11 Baltimore, Md.

GENUINE BARNITZ PIGS.
The subscriber has for sale the following pigs, which are warranted genuine:
2 pair 4 months old, and
1 pair 10 weeks old.

The Barnitz hogs are distinguished for their early maturity and size, attaining upon clover pasture from 250 to 300 lbs. when 12 and 15 months old. The price of the largest size is \$15 a pair; that of the smallest 10 a pair.

Applications by letter to be POST PAID.
EDWARD P. ROBERTS,
oc 30 Baltimore, Md.

FOR SALE,
COLUMBUS, a well bred race horse—his pedigree, which is perfect, will be given. Enquire of
no 6 St EDW. P. ROBERTS, Ed. Farm. & Gard.

THE FARMER & GARDENER.

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, E. P. ROBERTS AND SAMUEL SANDS—EDITED BY E. P. ROBERTS.

No. 35.

BALTIMORE, MD. DEC. 25, 1838.

Vol. V.

THIS publication is the successor of the late **AMERICAN FARMER** and is published at the office, at the N. W. corner of Baltimore and North streets, over the Patriot office, at two DOLLARS AND FIFTY CENTS per annum, if paid within one month from the time of subscribing, or \$3 if after that time. All letters to be post paid.

BALTIMORE: TUESDAY, DEC. 25, 1838.

ROBERTS' SILK MANUAL.

This work is now ready for delivery. Persons desirous of obtaining copies of it will do well to make early application, as a large number of the edition is already engaged.

Price per single copy, 37½ cts.—to dealers who take 100 copies or more, a deduction of 33½ per cent. discount will be made; to those who take a less number, 20 per ct. will be allowed—terms, cash.—It contains 100 large octavo pages.

Agreeably to our promise in our last paper, we insert the rejoinder of the Messrs. Prince & Sons. When we first read it we designed accompanying it with critical remarks; but as its spirit is too obvious to need them, we will not occupy the time of the reader in comments, further than to observe, that if the Southern advertisements have contained attacks upon northern grown trees, they have never fallen under our notice, or we should have felt ourselves bound in duty to rebuke the feeling which prompted them; for if there be any thing more than another that we dislike, it is that narrow-mindedness which sometimes prompts men to elevate themselves at the expense of their neighbors, or to disparage an article because it may have grown in a different section of the country from the one in which they may chance to dwell.

The paragraph of the Messrs. Prince, to which we took exception, although it had been, as we have subsequently learnt, in our paper some weeks, never met our eye till it was pointed out to us in the N. Y. E. Star, the advertisements not being read by us. This will account for our not noticing it earlier.

We have but a word or two more for the Messrs. Prince—they are these—if their remarks, in which they speak of the "aid of editorial comments, and of some editors who are actually engaged in selling trees" are intended for us, and as an im-

pugment of our motives—we tell them the insinuation is no less unjust to us than it is unworthy of them—that men who are at peace with their own consciences, are not apt to indulge in suspicions of others—that impertinence is as undignified as it is harmless—and that coarseness of language is alike the evidence of weak and depraved minds.

The Journal of the Franklin Institute.—The November number of this valuable periodical is before us, and we seize the occasion to say, that it is worthy of the patronage of every man of science, and every mechanic in the country. The present number, like its predecessors, is filled with matter of the deepest interest to those engaged in most of the departments of life, and if merit is to be the rule by which its circulation is to be judged, we are certain it has a most extended one—This we do know—that it deserves it.

We commence the publication from it, to-day, of a very interesting article on the "progress of physical science," which we are sure will be read with avidity by all.

For the Farmer and Gardener.

LINNEN GARDENS, }
Flushing, Dec. 8, 1838. }

E. P. ROBERTS, Esq.

Sir—In reply to the article in your paper of the 4th inst. we have to state, first, that it is intended in our advertisement to assert, that the number of buds on trees raised here exceeds the number on southern trees by one-third of their number, which is equal to 50 per ct. greater than the southern trees, and we thence claimed the 50 per ct. advantage. It appears however, that the words in the advertisement which were written in haste, may be misconstrued, and you have consequently misinterpreted them. In speaking of the Southern trees, we refer to those more particularly of Georgia, Florida, Louisiana, &c. Second—We wish in no case to praise our trees "at the expense of southern growers," but after the repeated attacks on Northern trees, which have filled the Southern papers, and formed part of Southern advertisements for the last three months, and which have in addition received the aid of Editorial comments, and of some Editors who are actually engaged in selling trees; and when the most silly remarks have been made in some of the advertisements in which it is declared that all trees are less valuable when grown "north of Philadelphia," and that "northern dealers give a decided preference

to southern trees," which remarks are so notoriously false, that every one here and at Burlington, and Philadelphia, will attest, that the last season the Southern trees, when sent on, could not find a purchaser on equal terms with northern trees, and that in most cases they remained unsold till the stock of northern trees was exhausted. We say that after all these unprovoked attacks, knowing as we do the weakness and falsity of these assertions, we have deemed it time to act on the defensive, and it is only in that capacity we desire to act. We have never condemned southern trees, for all are no doubt highly valuable, and we have simply spoken of their comparative merits as regards the number of buds for propagation, and the superior hardihood of northern trees, on which points we beg leave to refer you to an article recently transmitted by us to that excellent paper, the Virginia Register.

We well know that the Southern mulberry trees will, like all other trees from the South, possess a tendency to grow to a later period of the season than northern trees, and therefore that they will not suit a northern latitude equally well, particularly as the present object at the north is to acclimate the tree fully to the New England states. On the other hand, it is well known, that the trees carried from the north, where they have become in a measure hardened, attain on being planted in a Southern latitude, the utmost development of which they are susceptible. In your concluding paragraph you have fallen into another error—you say, "If the wood be not matured, no germination of the bud will take place"—Now, sir, although we desire that the utmost maturity of wood should be attained in order that the tree may be protected from the severity of winter; and although we cut off many inches of the tops of the trees we now send away, merely to meet the prejudices of people who suppose that those green ends will not vegetate; we now assure you and the public that the green wood is more prompt to vegetate, and succeeds as cuttings fully as well or better than the mature wood. This fact has been promulgated some time since, and recently by a writer in the Virginia Register, and we are somewhat surprised that the distinguished editor of the Farmer & Gardener should not be cognizant of it. We have now an immense number of these cuttings, and the enlightened President of the Maryland Silk Company, who viewed them when here a few days since, can attest to their excellent appearance.

Yours, most respectfully,
WM. PRINCE & SONS.

To the Honorable the
Senate and House of Delegates of Md.:
The memorial of the undersigned respectfully sheweth, that the prosperity of the country would be greatly promoted by requiring of primary school teachers and others, in making out reports

on the state of education in their respective schools, to report assisted by the farmers, labourers, mechanics, professional men, merchants, &c., describing the soil, minerals, natural products, buildings, agricultural and mechanical implements of their school districts respectively, saying what raw materials may be brought into use advantageously to the proprietor and to the country—what new crops may be introduced with profit—what rotation of crops—what agricultural and mechanical implements—what improvements in the construction of the buildings—what manufactories—the state of education—what discoveries in natural history and the sciences—(premiums to be given for useful discoveries)—the microscope, barometer, thermometer, rain gauge and telescope, to be used in the schools—to aid in the study of natural history—to ascertain the habits and changes of insects that are destructive to our staple crops, fruits, vegetables, flowers, plants, shrubs, fruit, ornamental, forest trees and animals, together with the changes of the weather, records of which to be kept, not only with a view to observe its effects on vegetation—but to guard against its changes—what tests are used to ascertain the comparative value of agricultural and mechanical implements—what chemical tests to ascertain the quality of the soils, minerals, manures, &c.; whether astronomy is studied with a view to the application of that science to improvements in agriculture or otherwise—whether school or public libraries be established, and the character of such—the mode of instruction used by each in practical horticulture, from the planting of the seeds, budding and grafting of fruit, ornamental, forest trees, &c., to the transplanting, pruning, &c., and whether the art of ascertaining the quality of the fruit or timber, especially the bird's eye maple, from the leaf, bark or growth be attended to—also what attention to vocal and instrumental music—as well as the general statistics of their respective districts.

CARROLL OF CARROLLTON.

WORN OUT FIELDS.—The farmers who are on worn out farms have within the last 2 years been pursuing a very judicious business in resuscitating them with marl, lime and ashes. The course pursued is to sow buckwheat first, which will grow on a worn out field. When the buckwheat is in blossom, they roll it in and put on the lime, marl or ashes, whichever they may have. Is not this worthy the notice of those who have worn out fields?

An Agricultural Society in Kentucky has awarded a premium of a gold thimble to Mrs. Dr. Leavel, for her husband appearing in the best suit of homespun.

MAXIMS OF THE ROMANS ON THE SUBJECT OF FARMING.—1. He is a thrifless farmer who buys any thing which his farm can produce.

2. He is no husbandman who does any work in the day time, that can be done in the night, except in stormy weather.

3. He is worse who does on work days what he might do on holidays; and

4. He is worst of all who, in a clear sky, works within doors, rather than in the field.

From the Village Record.

AMERICAN SILK.

At the time when there is so much doing and saying upon the production of silk, in this country, it cannot but be interesting to enquiring minds, to be so far made acquainted with facts and reasoning relative thereto, as to enable them properly to decide upon the merits of a branch of business, so interesting in its character, and which, if it can be successfully carried on, would save so many millions annually for the benefit of the people of this country.

Like the other great staples of our country sugar and cotton, it is essentially necessary, that both soil and climate, should be well adapted to the wants of the plants respectively producing them; and the ingenuity and industry of our people, to mould them to our wants. As regards the latter, it will be admitted without argument, that we will give the palm to no other country, for useful inventions, and the profitable use of them after their discovery. As far as our observation extends, there is no business that has claimed the attention of Americans, the profits from which have not been augmented by their ingenuity and invention of labor saving machinery, to a greater degree than any of their competitors.

Indeed, American skill and enterprise seem adequate to almost any undertaking. The answer of a French courtier to the unfortunate Marie Antoinette, seems particularly applicable to Americans. Who, when asked to perform a small favor, replied, "Madame, si la chose est possible, elle est deja faite; si elle est impossible, elle se fera."*

That the silk worm thrives well in our climate, has been fully proven, not only of latter time, but history informs us, that previous to the Revolution, Britain had satisfactorily ascertained this; and by bounties, and sometimes even by penalties, endeavored to encourage the introduction of the business in her then colonies. These efforts were made as early as 1623 by the colonial assemblies, at the instance of the crown, and continued until 1669; at which time raising silk had become so well established, as to require no further legislative encouragement.

Georgia had become actively engaged in silk raising, a short time before our rupture with England, and yearly exported to that country, many thousand pounds of raw silk, that sold for several shillings a pound higher, than that from any other country. More immediately preceding the war, the attention of the people of Pennsylvania, and adjoining states, became actively engaged in the silk business, with Dr. Franklin at their head. Some of the Eastern states had also become alive to the subject, and energetically entered upon the business. Our contest with the mother country, however, gave the people other employment, as well as deprived them of markets for the raw silk; and thus the business was pretty much discontinued, until after our declaration of independence. From that time until the present, it has gradually increased, until the small county of Windham, Conn. now produces annually as much as four tons of raw silk, worth forty thousand dollars.

We cannot, therefore, doubt but that the silk worm will do well in this country. From Maine

*Madam, if the thing is possible it is already done, if impossible it will be done.

to Louisiana have they been successfully reared, as it would appear, both in former and in latter time. In my next I propose to say something upon the food best adapted to the worm.

PENN.

Auction Sale of *Morus Multicaulis*.—The trees of this invaluable species of Mulberry commanded higher prices at the auction sale made by Wm. H. Franklin yesterday, than at any previous one. They were of moderate size, and the larger portion were quite small. The lowest price was 57½ cents, and the highest seventy cents, being from twenty-five to thirty cents per foot. Nearly the whole were taken by one purchaser, thereby causing much disappointment.—*N. Y. Evening Star*.

A FACT OF SOME IMPORTANCE TO SILK GROWERS.

In the year 1835 or 6, I purchased a small parcel of cocoons, which were kept through the summer and winter following, to the next season, about a year; I supposed the chrysalis of each had been stifled, but to my astonishment, from that very parcel, a miller came out from one of the cocoons the next year. And now the present year, 1838, after the first crops of worms in succession had spun their cocoons, a small number of eggs had been kept in a tin pail, suspended in a well, so as to rest upon the water, at the side of the pump, the top of the pail secured by a tin cover and a cloth saturated with beeswax and tallow, and thus kept, so as to bring forward the worms in parcels, as the foliage should increase, and the shelves or hurdles be emptied to bring out another parcel for hatching.

Some of these eggs were hatched and spun their cocoons in September, so few in number, however, that they were left in the cocoonery until within a few days, when it was discovered that the millers were coming out even as late as the 10th of November, 1838, having remained in the cocoonery about 8 weeks before any symptoms of the appearance of a miller, and the cocoons having been removed to a place where a fire is kept, have now a fresh crop of fine looking eggs. Some few days past the weather has been severely cold. The above method of keeping eggs has succeeded better, even than when kept on cakes of ice, the latter having failed to hatch late in the season.

Further experiments are worth the trial, not only to keep back the hatching of eggs, but also the late production of the millers. If these two conditions can be effected, why may not worms be fed even to the coming of frost? In my next I may tell you how leaves have been preserved to feed worms before the frost has destroyed the foliage in the field.—*Yankee Farmer*.

From the Columbia Telescope.

MANURES.

Mr. Johnson—In Ruffin's Farmers' Register for May, 1838, p. 111, is an extract from a letter by Lardner Vanuxem, Esq. formerly my aid in the College here, giving a very brief account of the localities of what he terms *shell marl*, in South Carolina, viz: Santee canal, Eutaw Springs, Dr. Jameson's, near Orangeburgh Court House, Mr.

Darby's, in St. Matthews, at Godfrey's Ferry, on the Pedee river, on the Edisto, &c. To which I have to add, a locality two miles south of Darlington Court House. *Marle*, technically, is a soil composed of sand, clay, and limestone, where the latter earth is in the proportion of one third or more. I have reason to believe that all the localities consist principally of limestone, with various proportions of sand, but very small quantity of clay, or argillaceous earth.

My son brought me, a short time ago, a specimen of the shells and soil from the great oyster bank on the Santee, which I believe extends eight or ten miles. I have also received from Judge D. Johnson, a specimen of the shell marl near Darlington Court House. I regard all these, from the character of the shells in them, to belong to the tertiary formation—in modern phraseology, antediluvian.

Of the specimen from Santee I took 100 grains of an oyster shell, (of an extinct species.) I dissolved it in muriatic acid, and about 5 per cent. of sand remained undissolved. I threw down all the limestone with carbonate of potash, boiling the solution to drive away any excess of carbonic acid, which is apt to keep limestone in solution. The liquor being filtered, and the residuum dried and weighed, furnished the expected proportion of limestone.

I took the earth with which the inside of the shell was filled up. I dissolved it as before, procuring about 90 per cent. of limestone. The residuum was chiefly sand, with but little clay-earth.

I took 100 grains of the common gravelly soil furnished me by Judge D. Johnson, from Darlington Court House vicinity. I rejected all the larger fragments of shells, taking what appeared to be the soil. I treated it as before, with muriatic acid, which dissolved perfectly 75 per cent. of the gravelly soil, leaving (when dried perfectly and weighed) 25 per cent. of soil, almost entirely sand, undissolved.

Here, then, in various parts of our state, are deposits of shell limestone, just as valuable for manure as any other whatever, to sandy, to clayey, or to an intermixture of sandy and clayey soil.—A source of wealth that is of very great extent and very great value.

Limestone in Europe is applied when burnt into lime, sometimes to the amount of 300 bushels per acre. Twenty hundred weight of limestone ought to be exposed to fire in the kiln, till it will yield but eleven hundred weight, or more accurately from 43 to 44 per cent. of carbonic acid ought to be driven off by the heat; else the lime is imperfectly burnt, and will not make good mortar. When laid and slacked upon the land, it regains from the air about 30 per cent. of carbonic acid in about 10 days, and is gradually changed into limestone again. Hence the necessity of keeping lime from the air, which is to be used as a cement; hence, too, powdered limestone may be as good as lime in most cases. I would, therefore, were I a farmer, merely grind and screen the shell marl, without burning it, and put at least 300 or 350 bushels of the screened earth per acre, on the land. This will form a good constitution for soil, and will permanently prove useful. I do not deem 400 bushels per acre, on sandy soils, too much, and the addition of clay will add

to the productive power of the mixture thus made. But as I am not a practical farmer, I say this with deference to the judgment of those who are.

I am, &c.

THOMAS COOPER, M. D.

PRESERVING ROOTS.

Every person that has a family should lay in a good stock of roots for the winter, whether he raises them or not; if he raises them, the best should be selected in the fall and properly preserved; and if he has to purchase them, then he should do it while they are in good condition, and save them well, instead of buying them after they have lost much of their good qualities; as is the case when they are saved without proper attention.

Beets, carrots, turnips, parsnips, &c. are often put into the cellar without any protection from the air, and they soon become dry and poor, or they may be put in large piles in a warm cellar and heat, and thus become poor. These roots of the proper shape and quality, should be selected very soon after they are dug, and saved in pure earth or sand. If there be a convenient place to lay them on the ground in a bin, or corner of the cellar, in small quantities, they may be saved well by covering them well with earth; if the quantity of roots be large, there should be alternate layers of roots and earth. If it be convenient, it is as well to put the roots in a close box or cask, first a layer of earth, then one of the roots, and a good covering of earth on top. Either of these methods may be followed as most convenient. The roots are best saved by being embedded closely in earth and having enough to cover them to prevent its drying readily.

When roots are covered with earth, they may be saved in a cooler cellar than when exposed, as they will be much less liable to freeze, and when thus protected they keep better where it is tolerably cool. Any pure earth, having only a common degree of moisture, is good for saving roots, and will answer about as well as sand if it be fine so that it will run down closely and cover them. A person, living in a city and having only a garden spot, can generally get good earth for this purpose, by removing the top as far as it has been cultivated and taking up the pure soil below.

Most farmers have good cellars in which they can lay their potatoes on the earth, and by keeping their cellars shut close and free from light they usually save their potatoes well without covering them, but they must not infer from this that other roots may be kept well in the same manner, for as they are more liable to injury from being dried and exposed to air, they should be protected with more care.

We have known good turnips and beets become very poor in a few months, when with proper care in laying them down in earth they might have been kept perfectly good till warm weather. We had some early garden stone turnips last fall, which kind is of as transient duration as any kind cultivated; we put them in a barrel with layers of earth, and were excellent the first of May; they continued good till the warm weather caused them to grow.

Most persons that raise parsnips let them remain in the ground until spring; and they have only a few messes before they begin to grow; in-

stead of this way, a part should be dug and put in the cellar, packed in earth, that they may be used as wanted through the winter.

The best roots for eating are of a small or middle size, the large ones should be given to stock. Turnips that were sown late and have acquired only one third or one half the usual size, are of a much better quality for present use, and they keep far better than those that have a full growth.

There is generally time enough to raise turnips for winter use after digging early potatoes. Some of sufficient size were raised in that way last year; and we have seen some this season that have already attained a good size for eating, on ground that has produced a crop of potatoes; and they will probably grow a month or more yet.

Yankee Farmer.

From the Yankee Farmer.

AGRICULTURAL IMPROVEMENT.

What was our country two centuries ago? What is she now? Then she scarcely knew the footsteps of civilized man. Her vast forests were the joint domain of wild beasts and savage Indian tribes. A long period elapsed, before the earth produced a sufficient supply for the thin white population that first inhabited these Atlantic shores. Improvement in agriculture was reserved for a late period. Comparatively but little attention has been paid to this most important subject until within the last half century. Even now at this enlightened age, it is too much neglected, altho' more has been effected within the last twenty-five years for the advancement of agriculture, than was done for a century and a half before. Still the progress in agriculture has not, in this country, been equal to that in various other pursuits of industry. And, in comparison with England or France, we are probably half a century behind them in agricultural improvements. It, therefore, behooves the friends of our national prosperity to lend a fostering hand; for it must be admitted, that agriculture is the grand basis of all other useful human pursuits. Without it none can flourish. We are far from asserting that the success of agriculture is not dependent upon that of other pursuits. They are mutually dependent upon each other, in a great variety of ways, too numerous to specify here. Were either commerce or manufactures destroyed, agriculture would necessarily decline, and the human family would return to a semi-barbarous, or, perhaps, savage state. The lights of science, or in other words, of knowledge, are also indispensable to agricultural improvement. And it is a matter of the highest importance, that all Farmers should be fully convinced of this truth. The aggregate good and prosperity of the whole, is the most effectually promoted by encouraging all laudable pursuits of honest industry. Malthus admits that "*labor is the only source of wealth.*" But he was not the first discoverer of this truth. It is a truth almost self-evident, and must have been admitted by all nations that arrived at a high state of civilization, and cultivated the arts and sciences.

Silver and gold, or money of any kind, do not, in, and of themselves, constitute national wealth; they are only the signs and standards of value.—The products of the earth, raised and fitted by the hand of labor for, and to our wants, conveniences and comforts, cause wealth and happiness to flow

in upon us. Should these products remain in the hands of the producer, whether farmer or mechanic, they would be of but little use or avail. Hence the importance and necessity of the merchant, who promotes the interests of the whole, by exchanging the surplus products, and supplying those who stand in need. Commerce is, therefore, rightfully considered to be the handmaid of agriculture and manufactures.

In taking a view of the present condition of our country, our hearts ought to be filled with gratitude to the Author of all good, that it is our lot to dwell in the finest country, and under the mildest and most liberal Government in the world. Perhaps most of us cannot, or do not, fully appreciate our high privileges. Here the farmer's hard earnings are not wrested from him to support a pampered nobility in idleness, luxury and affluence; but every man can enjoy the fruits of his own labor. What strong motives, therefore, have our farmers to increase their agricultural products! To do this, they ought to adopt the improvements correspondent to the age in which we live. The history of nations shows that such improvements have been, in some measure, proportionate to the increase of population. With this idea, let us turn our attention to the increase here. The fact admits of no doubt that our population has gone on doubling about once in 20 or 25 years, since the settlement of the country. Should the increase continue in the same ratio the next twenty-five years, what a vast population will dwell within our territorial limits! Consider also how diversified are our pursuits! How large a proportion of our population are engaged in our numerous manufacturing establishments, as well as in various other mechanic arts! View our thronged cities and populous villages in every section of our land, all of which are dependent means of subsistence upon the product of agriculture. Other classes too, embracing a large portion of our population, are equally dependent. These considerations convince us that the produce of our farms, will, for a long period, command a high price—a powerful stimulus not only to increase the quantity, but to make great improvements.—Those who will suggest and publish improvements through the medium of our agricultural papers for the benefit of our farmers, will promote their country's welfare vastly more than do the political conflicts of aspiring politicians. Information is wanted. No matter from what source or from what country it comes. Spread before us all the best modes of cultivation which have been adopted in our own country and in England, France, Holland, Germany, or elsewhere. Give us the reasons, and the proofs of the utility of such improvements, and then we would gladly adopt them, and as readily lay aside the old methods, which our fathers have handed down to us.

Great improvements may be effected through the instrumentality of Agricultural Societies, or associations amongst the most intelligent farmers, but it seems to us that still greater benefits may be derived from our numerous and ably conducted agricultural papers. In them we may read and carefully reflect upon the best written essays, as well as speculative theories. After a few years of attentive reading and reflection, we may have a storehouse of useful knowledge, to direct us in all our different rural operations. Although incor-

rect theories may sometimes be published, they are not without some use. We carefully reflect upon the same, and point out the errors and fallacies, and close reflection upon the subjects will finally lead us in the right way. Reasoning and reflection are as important and beneficial to the farmer as to the lawyer or statesman.

FABIUS.

WORCESTER, [MASS.] FAIR.

LINCOLN'S REPORT ON SWINE.

The following Report of the Committee on Swine, at the Worcester Cattle Show, is like all which have come from the same pen, full of wit and humor:

WILLIAM LINCOLN, of Worcester, *Chairman*; Hon. Samuel Mizter, of Braintree: Hon. Joseph Davis, of Northborough: Hon. Rufus Bullock, of Royalston: Hon. James Draper, of Spencer.

Massachusetts is a glorious Commonwealth. Her renown heretofore has been wreathed with the valor of her warriors, the wisdom of her statesmen, and the worth of her citizens. If hereafter in the vicissitudes of human affairs, patriotism shall grow faint, and public and private virtue become impaired, the fate of our own beloved State may rest secure on the greatness of her pigs: and the lustre of her people, if unhappily it grow dim, be rekindled by the solid excellencies of the inmates of the pens.

The town of Worcester has always been unrivalled for boars. They were now, as heretofore, more intense than in any other part of the ample territory of, a country extending between independent States.

The boar of Messrs. J. G. & D. H. Perry, speckled, but not striped, had proportions as exquisite as those of a fifteen gallon jug, into which no evil spirit had ever entered. "Born and distinguished" at home, to him was awarded the first premium of five dollars. The second premium of three dollars, was awarded to Mr. Israel Whitney of Worcester, for an animal that was entire, and as finely formed as if his frame had been raised by rule and square in days' works, and not constructed by contract. Mr. Edwin Curtis of Worcester, exhibited a pig, whose sire was a native of New York, and who traced his lineage back almost to Kinderhook. He trod so closely in the paths of his illustrious competitors as to be considered worthy of the recommendation that a gratuity of two dollars should be bestowed, the testimonial of affectionate regard. The pig of Mr. Aaron Howe, unlike the western citizen, who was not raised but grew up, was raised by hand, and had grown into a fine specimen of domestic industry and skill in pork manufacture. The individual owned by Mr. Samuel Harrington, of Worcester, of tender years and less robust figure than its neighbors, gave evidence of a genius for future usefulness, which, if cultivated and developed, may make him the head of large families of hopeful offspring, through coming generations.

In approaching the pleasant society of females, the loveliness of form and feature sometimes leads admiration away from the handsomeness of doings to the grace of being. The incorruptibility of the court permitted no such seduction. The sow of Messrs. J. G. & D. H. Perry appeared before them with ten "sweet pledges," of

maternal affection, frolicking merrily, and taking the young responsibility of feeding plentifully. The venerable matron, mother of this decimal family of suckers, who played over and around her, of the greatest boar of the festival, and of another troop of chubby, white haired children, was thrice blessed in being worthy of the first premium of five dollars. The second premium was awarded to Mr. Aaron Howe, of Worcester, for a sow, beginning in Holden, and subsequently gaining legal settlement in Worcester.

The "weaned pigs, not less than four in number," prescribed by the laws of the society, counted twenty-one. All of them were very nearly best. Six presented by Mr. Nathaniel Dodge, of Sutton, round, plump, and white, of the Whiting breed, were worthiest among the worthy of the premium of six dollars. Close behind them came those of Mr. Aaron Goodale, of West Boylston, deserving the premium of four dollars. In the long procession of the virtues of the pig, half a dozen of those of Mr. Nathaniel B. Flagg, of Shrewsbury, weighed in the balance with their competitors, were found so abounding that it is recommended to bestow on the proprietor a gratuity of two dollars. As the mother of the nursery of Messrs. J. G. & D. H. Perry, had received a premium for proficiency in the multiplication table, and her son had received equal favor for declining to study or adopt the principles of Malthus and Miss Martineau, against population, it was concluded that the swine of these gentlemen deserved a reward of better currency than gold, silver or irredeemable paper—in the circulating medium of praise.

Artemas Ward, Esq., who keeps the faithful history of the titles of our farms, permitted the name of an animal to be entered on the secretary's day book, and suffered judgment to be rendered for default of appearance. Among all the good deeds of the excellent register of the county, there is but this one instance, standing solitary and alone, where he ever did injustice to any living being. Depriving his pig of an opportunity to present himself on such occasion, and to show his merits, is an omission which even repentance cannot now supply.

The excellence of the State Lunatic Hospital is known wherever the name of the best charity of our government has been heard. Its works in pork were exhibited in three splendid editions; an octavo set which had been kept five months; four thick quartos six months and ten days old, and a series of gigantic folio volumes of fat. The swine belonging to the institution appeared to be perfectly rational, and of sound sense, and clear memory. Eight of them, in one vast brood, gave examples of the results of good treatment, $1\frac{1}{2}$ tons in weight. They resembled independent sub treasury depositories. When they stood, they lied; for they could not stand; they could scarcely sit; if they endeavored to place themselves upright in one direction, by an easy transition, they resolved into another equally perpendicular.—There were no objects bearing comparison with their huge dimension, except the vegetables transplanted from Wethersfield, celebrated in Morse's Geography, as the paradise of beauty and onions, by Dr. Woodward, whose unrivalled skill not only restores to the disordered and enfeebled mind its healthful action and vigor, but gives to

the earth he cultivates new powers of production. While the mouths of one committee have watered at the prospect of the living barrels of food in the pens, the eyes of another have doubtless been moistened in contemplating the odoriferous roots which have graced the hall.

It was gratifying to know the patriotic spirit which animated the vast delegation of swine from the hospital. With a promitide worthy of all approbation, they took measures to reach their appointed place the day before the fair. How their journey was performed is not known; to have rolled over the distance would have been the easiest mode of locomotion, for shapes as deep as broad, and broad as long. Loosening the green earth around, on their arrival, they stretched themselves on its feathery pillow to rest. The chairman, moved with deep anxiety for their repose, viewed them by a lantern at midnight, when they slept in the silver beams of the moon, like small mountains covered with snow. The music of their dreams floated as softly on the air as the melodies of Mr. Frank Johnson's celebrated band, which poured its sweet notes off hand on the ears of Queen Victoria. Nothing could alloy such happiness except the sad deprivation of the privilege of becoming members of the society and participating in its agreeable exercises. It has always been difficult to conceive how one pig could look another in the face without laughing from reflected enjoyment. These creatures had no face to look at—the chief extremity absorbed by the body, was only distinguishable from the termination which follows in the footsteps of his predecessor, by a delicate, white projection appearing as the representative of its absent constituent, the snout.

Unhappily the commonwealth is not a citizen of the county of Worcester. Although worthy of being admitted to the freedom of our community, she cannot at present claim a premium for her children. It is recommended that the sum of two dollars, which, if possible, would have been awarded to her, should be presented to Mr. Mirick M. Chaffin, the attendant of her hogs, by whose care they have been made to resemble elephants in miniature, with their trunks packed up.

That race recently introduced, whereby hangs no temperance tale, the Dedham breed, producing by its bite the dreadful horror of cold water, was entirely invisible. Lithographic representations rode on the rails of the pens. Whether the striped pig would have been examined had he been present, it is unnecessary to determine, as no opportunity was offered to consider its form or spirit.

One of the most lively writers of American sketches, in whose hands charcoal marks white, exclaims, "I wish I was a pig, there's some sense in being a pig that's fat: pigs are decent behaved people and good citizens, though they have no votes." No considerate spectator of the calm content and philosophical repose of the inmates of the pens could refuse to respond with heartfelt sincerity to such reasonable wish and opinions. Pigs do not buy lands, nor build houses, nor pay taxes, nor have bills left with an attorney for collection, nor subject themselves to the caprice of any court except that of the judges of swine. They are not abused for owning bank shares, nor obliged to borrow money to support those who denounce

them. They never burst their boilers, nor have messengers sent under an assignment process to confiscate their estates to defray the costs of settling them. Pigs are above being politicians. No hog of respectability was ever heard to express an opinion on the sub treasury system, or to commit himself in relation to the vexed question of the license laws.—Nor has it been ever known, that a pig has reversed the aspiration for happiness already quoted, by praying that he might be a man. There is no comparison between pigdom and manhood.

All which, in behalf of the pigs, and the absent councillor, and present senators, representatives, justices, officers and soldiers of the committee, is respectfully submitted.

WILLIAM LINCOLN, *Chairman.*

October 10, 1838.

[There is a very pleasant vein of wit in the above report; but we think the political allusions are in very bad taste, and by no means calculated to advance the cause of agriculture. *Ed. Farmer and Gardener.*]

Talking of Swine, there's no breed like the Berkshire. They are all the go: short legs, plump, barrel-form bodies, with full busts and real classic heads. They eat but little, fat quick, and keep themselves as white as chalk and clean as a penny. Capt. Samuel Williams killed one the other day, which weighed 450 pounds, and we were called to see one belonging to Mr. Lewis Strong last week, a few hours before he was consigned to the executioner, which weighed, after his decease, 375 pounds. He could scarcely see an "inch beyond his nose," he was so corpulent, and the fat was so thick upon his ribs that he breathed like a man with the asthma. Mr. Ferry, in South-street, has one of the same beautiful breed, which he keeps to show pig amateurs.—*North. Cour.*

SCALDING HOGS.—A gentleman of experience and observation, desires us to make known, for the benefit of farmers, a mode practised by him of scalding hogs.

Instead of putting cold water, or ashes into the hot water, as generally practised, he washes the hog in cold water previous to scalding it. It matters not how hot the water may be with which the hog is scalded, let cold water be first used in the way prescribed, the hair can be taken off with ease and neatness. No danger need be apprehended of the hair becoming set, as is often the case when this mode is not resorted to.—*Yankee Farmer.*

SWEET POTATOE.—The sweet potatoe is somewhat difficult to preserve for seed. In several attempts to keep them through the winter we have totally failed. Recollecting to have somewhere read that smoke was a great preservative of the sweet potatoe, we last fall packed in very dry earth a box of them, and placed it in a position free from frost and exposed to the influence of smoke. The result was entire success? A few large ones which we intended to have used were laid on the top and covered with a mat. They were forgotten, and remained there till May perfectly sound.

ON THE DISEASE OF DOMESTIC ANIMALS.

Spavin—This is a disease of the horse's hock, and most generally causes lameness. It is of two kinds; viz. the bone, and the bog or blood spavin. The former consists of a bony enlargement of the inner side of the hock joint, towards the lower part; the most effectual remedy for which is firing; and if it be done at an early stage of the disease it will probably cure it. Another method of treating bone spavin, is to make an incision with a knife or bore a hole in the bony swelling with a hot iron, and introduce into it a little sublimate of arsenic, which confine with a plaster; this generally occasions violent inflammation, and often excites symptomatic fever endangering the horse's life—it in some cases however is beneficial, and the animal so far recovers as to be useful. It is, however, a remedy we should ourselves be loath to practice, considering the first named remedy by far the best if performed at the proper time.

Blood spavin is a soft but elastic tumor on the hock a little above where the bone spavin occurs, and more on the inside, or towards the bend of the joint. It does not often cause lameness, except when the horse's work is severe. It is seldom removed; and although it may, when larger, render the horse unfit for severe exertion, it is rarely an impediment to moderate labor. If any thing be done, continual blistering will be most likely to prove beneficial. Horses most disposed to these diseases, are such as are cat-hammed, or have their hocks inclining inward, which tendency is increased by making the outside heel of the shoe higher than the inner. Working the horse at too early an age is another cause of spavin, and should not be practised.

Roaring—which takes its name from the wheezing noise the horse makes in breathing, when put into quick motion. It is supposed by some writers to be caused by an effusion of coagulable lymph in the windpipe, and is considered incurable. When it becomes very violent you may consider your animal useless, as it will render him unfit for any kind of work.—*Michigan Agricult.*

REMARKS ON THE CULTURE OF PEAS.

Crops of secondary importance are of course deserving of less attention than those which are primary;—such as, in consequence of a limited market, do not readily command cash, are not so valuable to the farmer as those at all times in extensive demand. Thus for instance, the culture of buckwheat and rye are not worthy of so much attention as that of wheat.—But when a crop of secondary importance in itself, becomes a very useful auxiliary in the cultivation of the most important, it immediately assumes a rank of that first consequence. It is this which renders the cultivation of peas highly deserving the attention of farmers.

It has been long since satisfactorily determined that attempts to make money rapidly from land by close cropping, is the worst economy; and that on the contrary a proper system of rotation, calculated to effect a constant improvement in the soil, is, in consequence of the full and regular crops thus obtained, the best policy even for the time being. Thus an abundant crop of peas followed by one

of wheat, would be more advantageous than two successive and inferior crops of wheat, independently of the effect on the land.

The peculiar excellence of peas as a preparation for wheat, is well becoming known. Their additional value as food for fattening domestic animals, especially hogs, renders the knowledge of their proper culture of much importance, and any suggestions therefore upon this subject it is presumed may not be wholly useless.

With regard to a proper soil for peas, it is commonly believed that a poor, or but moderately fertile one, is best, and that the great growth of stalk produced by very rich land, is averse to the copious production of seed. This is doubtless generally the case, when the larger and taller varieties are sown; in these there is already a strong tendency to the growth of leaf and stalk, which is increased by a fertile soil. But this may doubtless be in a great degree if not entirely remedied, by the substitution for the taller kind, of the early and dwarf varieties, such as Bishop's dwarf Prolific and early Washington. Indeed it is not improbable that much larger crops than have been hitherto obtained, may be raised from dwarf peas thickly sown on fertile ground.

Analogous proof is furnished by the fact that much larger crops of Indian corn have been raised in the northern states from the stalked varieties, than in the fertile land of the south and west where this plant grows of gigantic size.

On many poor soils, there can be no doubt, that peas are a much more profitable crop than corn, as they produce as much in such case to the acre, are more valuable for farm stock, and are an actual benefit instead of injuring the land, especially if a preparation for wheat.

Where the object is chiefly to prepare the ground for wheat, selection of soil is not of course to be obtained; in such cases therefore, it becomes important to adopt the variety to the soil, choosing the earlier and smaller for fertile and the larger and taller for more sterile land.—*Michigan Ag.*

Horses and cattle should be placed so that they may provide themselves well with pure water, during warm weather. Do not some farmers neglect this too much?—*Id.*

Silk Bounty in Vermont.—The Legislature of Vermont have passed an act, offering 25 cents for every pound of cocoons hereafter raised in the State; 25 cents for every pound of raw silk reeled from cocoons; and the same sum for every pound of sewing silk manufactured therein.

We may expect similar enactments in other States during the present winter, when their Legislatures are generally in session. Pennsylvania, New-Jersey, Connecticut, Massachusetts and Vermont, already offer bounties on the cultivation and manufacture of this article, as the best incentive to general and successful operation in what will shortly become one of our principal branches of industry.—*Germantown Tel.*

Butter.—The New Yorkers are complaining of monopoly in this article. The Morning Herald says—

Throughout all the butter counties, the season has been a favorable one, and we learn from the best authority that there was never more butter

made than during the present season. The quantity made in Orange county will be 40,000 firkins, in Delaware, 28,000; Chenango, 19,000, Washington, 12,000, Oneida 12,000, and other counties in proportion, and yet the rate in this market by the firkin is from 25 to 28 cents. Why is this? Simply because a horde of speculators, (a list of whose names we have, and will publish in our next upon this subject,) have gone through the counties buying up every pound of butter from the farmers, at prices ranging from 18 to 21 cents. One company has invested \$800,000. From 16 to 20,000 firkins are now held by this nefarious clique, who compel the poor laboring man to pay the above high rate for this butter, which is as much a necessary as beef, and far more wholesome for his children, when it might well be afforded for 18 to 20 cents.

PROGRESS OF PHYSICAL SCIENCE.

TRANSLATED FOR THE JOURNAL OF THE FRANKLIN INSTITUTE, BY J. GRISCOM.

On the part which the Soil acts in the process of Vegetation. Memoir read at the Academy of Sciences, by J. PELLETIER.

The ground is the support and nurse of plants; in its bosom, by means of roots, they seek for and find a portion of their nourishment. But to this truth, so simple and obvious, are attached questions of a complicated nature, and of the highest interest to Physiology and Agriculture. With one, among others, I have been particularly arrested, and it has been the object of my meditations. Before I enter upon it, permit me to bring into view some facts which appear to be necessary to the discussion of it.

The earth is not an elementary substance. Its exterior bed, the residence of plants, is formed of various metallic oxides, silica, alumina, lime, to which are often joined magnesia and the oxide of iron. It contains, moreover, the detritus of organic matters which had before possessed life and existence. Thus constituted, and under the influence of air, water and imponderable fluids, the earth is eminently fit for the development of germs deposited in its bosom, and to the growth of the vegetables which flourish upon it.

The necessity of the presence of organic matter, to constitute a soil, and endow it in the highest degree with vegetative force, cannot be considered doubtful. In vain did Tull, in 1773, attempt to maintain that distinct earthly particles, formed the sole nourishment of the plant. This theory was overturned by the positive experiments of Duhamel, who at first embraced it. Nevertheless, if it is certain that the presence of organic matter is a condition of fertility, we may still ask whether it is so essential a condition—such a *sine qua non*—that a plant cannot vegetate in a soil totally deprived of organic matter, particularly if other circumstances, such as the presence of water and carbonic acid, be united with it.

Numerous experiments have been made to resolve this question. Many of them are contradictory. The great portion, from the high interest which they involve, ought to be discussed and repeated with care. But another question not less important, and which I think ought to be first ascertained, is this: *What influence have soils themselves in the act of vegetation?* To this question I at present confine myself.

A vegetable soil, in its normal state, must be considered a mixture of various earths, that is, of metallic oxides.

Every soil devoted to Agriculture, is, in general, says Chaptal, formed of a mixture of silica, lime and alumina, and in support of this assertion he cites various analyses.*

Davy confirms this statement in his *Agricultural Chemistry*, and in fact, not a single instance of a fertile soil has occurred, which consisted of only one earth, or even of two, such as lime and silice, silice and alumina, alumina and lime.

In another passage in his *Chimie Agricole*, Chaptal expresses himself thus;

“A mixture of lime, silice and alumina forms the basis of a good soil; but that it may possess all the desirable qualities of good land these ingredients must exist in certain proportions, which analyses of the best soil can only establish.

If we consult the analyses of the most fertile soils, we find that fertility diminishes in proportion to the predominance of either of these principal earths, and that it becomes almost null when the mixture has the properties of only one of them.”

Complexity of composition is therefore, in general, a condition of fertility in a vegetable soil. The loose earth which we find in vallies arising from the decomposition of primitive rocks, makes generally an excellent soil. Now, we know that granite, composed of quartz, feldspar and mica, and frequently amphibole, must yield by its decomposition, a soil containing silica, lime, alumina, and a little magnesia and sometimes potash. Soils, originating on the contrary, from the decomposition of more simple rocks, siliceous limestone, for example, are lighter, and suitable only for a limited number of plants; they require, says Chaptal, to be enriched, and are valuable only in moist climates. Land originating in the decomposition of trap, basalt and other rocks of complicated ele-

* A very fertile soil in Sweden was found by Bergman to consist of:

Coarse Silice,	30	} 56
Silica,	26	
Alumina,	14	
Carbonate of Lime,	30	
	100	

A fertile soil in Middlesex gave Davy—Siliceous Sand 3-5; the remaining 2-5 consisted of

Carbonate of Lime,	28
Silica,	32
Alumina,	39

Analysis of a fertile soil in Touraine:

Sand,	49
Silica,	16
Alumina,	10
Carbonate of Lime,	25
	100

A very fertile compost, formed by Tillet consisted of clay 3-8, pulverised lime-stone 3-8, sand 28, corresponding to

Coarse Silice,	25
Silica,	21
Alumina,	16.50
Carbonate of Lime,	37.50
	100

ments, possesses, on the contrary, great natural fertility.

"Rivers," he further adds, "receive in their courses other streams whose mud is mingled with its own, and it often happens that the united sediment of two rivers possess greater fertility than that of either separately."

This then appears to be an established fact, that a soil, (independently of organic matter) is the more fertile as its composition is more heterogeneous.

If we seek for an explanation of this fact, we find in authors only vague opinions and doubts; the greater number merely state the facts without attempting an explanation.

Agricultural chemists, who indulge more in theory, appear to guard the cause of fertility as dependent on the physical character of the soil rather than on its chemical constitution. Thus Davy having observed that different soils attract moisture with different degrees of energy, and having discovered, as he believed, that the most hygro-metric soils were the most fertile, he ascribes their superior fertility chiefly to this property. But Davy has not proved that the hygrometric force of a soil bears any given relation to its composition.

If this attraction for moisture were the principal cause of fertility (abating the influence of manure) the three earths in the constitution of a soil of the first quality. Indeed a certain quantity of alumina in a soil otherwise entirely siliceous, or entirely calcareous, a certain proportion between the adhesive and the loose or sandy portions, would be sufficient to confer this hygroscopic quality, and of course the fertility of the soil. But we have nothing to confirm this supposition.

The hygroscopic quality of a ternary soil may then be considered as an *element* of fertility, but only a secondary element, subordinate to its chemical composition.

The property of becoming more or less heated by the rays of the sun, which appeared to Davy to hold a relation to the fertility of different soils, appears to be also a secondary cause. In the cases referred to by him there was a mixture of black mould, and he did not sufficiently consider its fertilizing action as a manure upon the soil.

To me, it appears evident that the mixture of the various earths which compose a soil, acts upon vegetation and determines its fertility by an *electro-chemical force*, whose action has been clearly recognised in other circumstances, but not yet brought into view in the case now under consideration. In the first place, let us observe that it is a fact, though the truth may have escaped observers, or rather, it has not yet been brought under a formula, that the silica, alumina and lime which enter into a good vegetable soil, must not be combined with each other, but simply mixed, the lime being in the state of a carbonate. A triple silicate of lime or alumina, in which the siliceous, lime and alumina should be in the proportions which constitute the best arable land, could not, even if thoroughly divided, furnish a soil essentially adapted to vegetation. If in a fertile soil, composed of a mixture of lime, alumina and silica, a combination between these three oxides should begin to take place, the ground would become

cold and sterile. Now, it is certain that in a mixture of these three ingredients, a force does exist which tends to combine them. According as external or mechanical movements of the soil, or other foreign causes, shall bring these molecules within greater or less distances from each other, and group them in various ways, electrical piles will be established, discharges will take place, producing various tensions, and the earth will thus, if we may use the term, become animated. The electric fluid which pervades it will excite the stomata of the radical fibrils, determine the play of the organs, and the absorption of the fluids requisite to the nourishment of the plan. The radical fibrils, and the capillary roots impregnated with moisture, will become so many electrical conductors, engaged in transmitting electricity, certainly as necessary to life as light and caloric. (To be Continued.)

A large majority of the Delegates from the State of Maryland, to the National Silk Convention, assembled at the Masonic Hall in the City of Baltimore, on the 13th of December, 1838.

Luther J. Cox, Esq., was appointed Chairman, and Thos. H. Dawson, Secretary.

The necessity and expediency of forming a State Convention, to meet at Annapolis during the session of the Legislature, was taken into consideration, and on motion it was Resolved, that a State Silk Convention be formed, to meet at the City of Annapolis, on the 3d Tuesday in January next.

Resolved, That the citizens of each county in this State, friendly to the culture of Silk, be requested to hold meetings and appoint, not exceeding 5 delegates, to meet said Convention to be held in the City of Annapolis, at the time mentioned in the foregoing resolutions.

The newspapers of the State are requested to give the above a few insertions.

LUTHER J. COX, Chairman.
THOS. H. DAWSON, Secretary.

FOR SALE,

A valuable FARM of prime soil, on the Western Run in Baltimore county, about two miles north west of the 14th mile stone of the Baltimore and York turnpike road, and at the same distance from the depot of the Baltimore and Susquehanna rail road, at Cockey's tavern, in a rich, highly cultivated and healthy tract of country.

This farm contains from 260 to 270 acres, having a full proportion in wood, much of which is building timber, peculiarly valuable in that neighborhood; is in the best state of cultivation; a considerable part in productive timothy meadow, and the residue of the arable land, not in grain, is well set in clover, the whole under good fencing, laid off into convenient fields, each of which is well watered. The farm has a large quarry of excellent building stone. There are on the premises an apple orchard of select fruit trees, which seldom fail to bear abundantly; a valuable mill seat on the Western Run, with a race already dug. There is no location in the country more favorable for a grist mill, having the advantage of a rich and thickly settled neighborhood, and a good public road leading thence to the turnpike road. Buildings substantial and convenient, being a STONE DWELLING, and kitchen of two stories; a large stone Switzerland barn, with cedar roof and extensive stabling below; large hay house and stable for cattle; stone milk house near the dwelling, with a spring of fine never failing water, with other out-houses. On the country road near the mill-seat a good house and shop for a mechanic, under rent to a good tenant. It is well known the lands on the Western Run are in every respect equal, if not superior to any in the county. Adjoining or near are the lands of Col. N. Bosley, Daniel Bosley, T. os. Matthews and others. The water power, with about 20 acres of land, is so situated that they may be detached and sold separately, without injury to the rest of the farm for agricultural purposes. Terms of sale will be liberal. Apply to

NATHANIEL CHILDS,
on the premises, or to
WILLIAM J. WARD,
oc 23 tf Fayette, near Calvert st. Baltimore.

THE MARYLAND SILK COMPANY OF
BATIMORE

Offers for sale 25,000 genuine *Morus Multicaulis* trees, 20,000 *Alpin*, *Canton*, and other varieties.
d 25 L. J. COX, President.

SPLENDID BLOODED STOCK FOR SALE.

The proprietor of Covington farm will dispose of the following fine bulls on reasonable terms, v. z.

One bull two and a half years old.
One do. six months old.

of the improved *Durham short horn* breed; the dam of the first was got by the celebrated bull *Bolivar*; for size, form and beauty they are not surpassed by any animal in the state.

Three *Devon Bulls*, one of which is seven years old next spring, and the largest *Devon* in the State. The *Devons* are from the stock of the late Wm. Patterson, and of undoubted purity.

Two half *Devon* bulls.

Two bulls half improved *Durham short horn*, and half *Devon*.

One splendid bull, a cross of the *Bakewell*, *Alderney* and *Devon*.

One bull, half *Alderney* and half *H. Istein*.

These fine animals may be seen at Covington farm, near *Petersville*, *Frederick county*, Md. on application to *James L. Hawkins*, *Baltimore*, or to

no 11 f FREDERICK EBERT, Manager.

CHINESE MULBERRY TREES.

American Silk Agency, No. 95, Walnut st. Philadelphia.

The subscriber having opened a permanent Agency for the purchase and sale of all articles connected with the culture and manufacture of Silk in the United States, offers for sale all the different varieties of MULBERRY TREES, suitable for raising the SILK WORM; viz: *Morus Multicaulis* *Alpinese*, *Brussa* *Multicaulis* Seedlings, *Morus* *Expansa*, *Multicaulis* Cuttings, Improved Italian Trees, &c. Also, Cuttings from *Norton's Virginia Seedlings*, and *Cunningham's Prince Edward Grape Vines*. These vines produce an abundant crop of fruit, warrantable not to rot or mildew and are fine for the table, and capable of yielding the finest wines.

S. C. CLEVELAND, Agent.

N. B. The particular attention of those engaged in the culture and manufacture of American Silk, whether of trees, Eggs, Cocoons, reeled or manufactured, is called to this agency. The Agent will give every attention to Sales, and prompt remittance of proceeds of any article sent to him. Those who may wish to purchase and enter in this valuable branch of home industry, can obtain from the agent every information, and also such articles as they may want without fear of deception. oc 9 tf

CHINESE MORUS MULTICAULIS, &c.

At the *Linnæan Gardens*, *Flushing*, *New York*.

50,000 splendid TREES of the genuine *Morus Multicaulis* are yet remaining for sale at moderate prices according to their size; and also Cuttings of the same. None of the *Humburg* kind are sold at this establishment. Also 20,000 trees of the splendid *Morus Expansa*, which has very large leaves, greatly loved by the worm, it is very hardy, and yields silk of the first excellence. A great supply of the *Moretti* or *Alpine Mulberry*, the *Canton*, *Dandole*, *Broussa*, *Asiatic*, *Pyramidalis*, *Rose* of *Lombardy*, *Morus* *Alata*, and other varieties.

Also Fruit and Ornamental TREES, Plants and Seeds of every kind, and an immense stock of Bulbous Flower Roots, just arrived from Holland.

Silk Worms Eggs of every kind at the lowest prices, and White Italian, *Canton*, and *Moretti* or *Alpine* Mulberry Seeds in any quantity. The *Morus Multicaulis* Trees cultivated in our nurseries are remarkable for the closeness of their joints, and furnish about 50 per ct. more buds for propagation than trees raised far to the south; the wood also becomes as mature and perfect on the high exposed position our Nurseries occupy as in any part of the Union. Also, Fruit and Ornamental Trees, Bulbous Roots, Green House Plants, and Seeds of all kinds, for sale in large or small parcels.

Priced catalogues will be sent to every applicant, and orders per mail will be executed with as much precision and dispatch as if the purchasers were present, and will be packed so as to be sent to the remotest region with safety. no 20-2m WM PRINCE & SONS.



BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every Monday

	PER	FROM	TO
BEANS, white field,.....	bushel.	1 25	—
CATTLE, on the hoof,	100lbs	7 00	9 50
CORN, yellow	bushel	75	81
White.....	“	75	81
COTTON, Virginia,.....	pound	9	11
North Carolina,.....	“	9 1/2	11
Upland,.....	“	9 1/2	11
Louisiana — Alabama	“	11 1/2	12
FEATHERS,	pound.	45	50
FLAXSEED,	bushel.	1 12	—
FLOUR & MEAL—Best wh. wh'tam.	barrel.	10 00	10 50
Do. do. baker's.....	“	—	—
SuperHow. st. from stores	“	8 00	8 12
“ wagon price,	“	7 75	7 75
City Mills, super.....	“	8 12	8 25
“ extra	“	8 50	—
Susquehanna,.....	“	—	—
Rye,	“	5 50	—
Kiln-dried Meal, in hhds.	hhd.	19 00	—
do. in bbls.	bbl.	4 00	—
GRASS SEEDS, wholes. red Clover,	bushel.	15 00	—
Kentucky blue	“	—	—
Timothy (herds of the north)	“	3 00	—
Orchard,	“	2 00	2 50
Tall meadow Oat,.....	“	—	3 00
Herds, or red top,.....	“	90	1 00
HAY, in bulk,	ton.	12 00	16 00
HEMP, country, dew rotted,.....	pound.	6	7
“ water rotted,.....	“	7	—
HOGS, on the hoof,	100lb.	9 00	—
Slaughtered,.....	“	8 00	8 50
HOPS—first sort,.....	pound.	9	—
second,	“	7	—
refuse,	“	5	—
LIME,	bushel.	32	33
MUSTARD SEED, Domestic, —; blk.	“	3 50	4 00
OATS,	“	44	45
PEAS, red eye,	bushel.	—	1 12
Black eye,	“	1 00	1 12
Lady,	“	—	—
PLASTER PARIS, in the stone, cargo,	ton.	4 50	—
Ground,	barrel.	1 50	—
PALMA CHRISTA BEAN,.....	bushel.	—	—
RAGS,	pound.	3	4
RYE,	bushel.	88	95
Susquehanna,	“	—	none
TOBACCO, crop, common,.....	100lbs	5 00	5 50
“ brown and red,.....	“	6 00	6 25
“ fine red,	“	8 00	10 00
“ wrappery, suitable	“	—	—
“ for segars,.....	“	10 00	20 00
“ yellow and red,	“	8 00	10 00
“ good yellow,	“	8 00	12 00
“ fine yellow,	“	12 00	16 00
Seconds, as in quality,	“	6 00	—
“ ground leaf,	“	5 00	8 00
Virginia,	“	4 50	6 00
Rappahannock,.....	“	—	—
Kentucky,	“	5 00	8 00
WHEAT, white,	bushel.	1 75	1 78
Red, best	“	1 70	1 75
Maryland	“	1 50	1 70
WHISKEY, 1st pf. in bbls.	gallon.	41	43
“ in hhds.	“	43	44
“ wagon price,	“	43	40
WAGON FREIGHTS, to Pittsburgh, ..	100lbs	2 00	—
To Wheeling,	“	2 25	—
WOOL, Prime & Saxon Fleeces, ..	pound.	50 to 55	—
Full Merino,	“	45 50	—
Three fourths Merino,.....	“	40 45	—
One half do.....	“	35 40	—
Common & one fourth Meri.	“	35 40	—
Pulled,	“	30 33	—
POTATOES, 60 to 70 cts. a bushel.	—	—	—

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,	barrel.	—	—
BACON, hams, new, Balt. cured....	pound.	15	—
Shoulders, do.....	“	14 1/2	—
Middlings, do.....	“	14 1/2	—
Assorted, country,	“	13	—
BUTTER, printed, in lbs. & half lbs.	“	31	37 1/2
Roll,	“	25	31 1/2
CIDER,	barrel.	1 75	2 00
CALVES, three to six weeks old....	each.	5 00	6 00
Cows, new milch,	“	25 00	40 00
Dry,	“	12 00	15 00
CORN MEAL, for family use,.....	100lbs.	1 75	—
CHOP RYE,	“	1 50	1 60
EGGS,	dozen.	12 1/2	—
FISH, Shad, No. 1, Susquehanna,	barrel.	9 75	10 00
No. 2,	“	9 50	—
Herrings, salted, No. 1,.....	“	5 75	—
Mackerel, No. 1, ——— No. 2	“	12 50	—
No. 3,	“	—	7 25
Cod, salted,	cwt.	3 25	3 37
LARD,	pound.	14	15

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

U. S. Bank,par		VIRGINIA.	
Branch at Baltimore,.....do		Farmers Bank of Virgi. par	
Other Branches,.....do		Bank of Virginia,.....do	
MARYLAND.		Branch at Fredericksburg,do	
Banks in Baltimore,....par		Petersburg,.....do	
Hagerstown,..o		Norfolk,.....do	
Frederick,do		Winchester,.....do	
Westminster,do		Lynchburg,.....do	
Farmers' Bank of Mary'd,do		Danville,.....do	
Do. payable at Easton,....do		Bank of Valley, Winch. par	
Salisbury,..... 1 per ct. dis.		Branch at Romney,... par	
Cumberland,..... par		Do. Charlestown, ... par	
Millington,.....do		Do. Leesburg, ... par	
DISTRICT.		Wheeling Banks,.... 2 1/2	
Washington, } Banks, &c.		Ohio Banks, generally 3	
Georgetown, }		New Jersey Banksgen. 3	
Alexandria, }		New York City,..... par	
PENNSYLVANIA.		New York State,.... do a 1/2	
Philadelphia,.....par		Massachusetts,..... 1 1/2 a 2	
Chambersburg,..... 3		Connecticut,..... 1 1/2 a 2	
Gettysburgdo		New Hampshire,.... 1 1/2 a 2	
Pittsburg,..... 2 1/2		Maine,..... 1 1/2 a 2	
York,..... 1 1/2		Rhode Island,.... 1 1/2 a 2	
Other Pennsylvania Bks. 2		North Carolina,.... 3 a 3 1/2	
Delaware [under \$5].... 4		South Carolina,.... 4 a 5	
Do. [over 5]..... 1 1/2		Georgia,..... 5 a 5 1/2	
Michigan Banks,..... 10		New Orleans..... 7 a 8	
Canadian do..... 10			

BARHAMVILLE INSTITUTE,

With 10,000 Morus Multicaulis Trees, for sale.

The establishment now offered for sale, is called Barhamville. It is beautifully and eligibly situated about 2 miles from Columbia, (the capital of S. C.) in a region of country termed the Sand-Hills. The grounds comprehend between 500 and 600 acres; they are well timbered, (chiefly pine and small oak); about one half consist of what is termed bottoms, rendered perfectly dry and tillable, by at least 6000 yards of ditching, most of which measures 5 feet in width by 3 1/2 in depth. There are upwards of 70 acres completely ditched, now ready for being broken up, which I value at \$50 per acre.

The Institute buildings are situated upon a high range of Sand-Hills, proverbial for health, inasmuch that the neighborhood affords a retreat for many of the families of Columbia during the summer months. It was on that account that the site was selected for the business (a female Boarding School) to which the buildings have been dedicated. The water is excellent, supplied by two pumps—besides which there are two excellent springs.

The centre building is of wood, well plastered, and neatly finished throughout, and measures 54 feet square, three stories high; the upper room or attic story being 15 feet in height. Beneath this building is an excellent cellar, above ground. The wings attached to the centre building are 100 feet each in length, the one 24 and the other 34 feet in width. The southern wing is of brick,

well plastered, two stories high, well finished throughout, having an excellent cellar above ground. The northern wing, recently built, is of wood, coiled throughout. It is three stories high, with an attic story equal in its area and superior in its height to the three lower stories. The basement story of this wing is of brick.

A mahogany spiral stair-case of superior workmanship, which with other improvements attached, cost upwards of \$2500, ascends throughout the centre building.

From the extremity of the brick wing, and at a right angle with it, proceeds a building, (the academic edifice) 134 feet in length by 34 feet in width, two stories high, well ceiled throughout, and having an excellent cellar above ground.

Besides fire-places, the whole establishment, with the exception of the brick building, is warmed by air furnaces, on the most improved plan, similar to that by which Grace Church and many public and private edifices in Philadelphia are warmed.

The expense of erecting the apparatus, &c. amounted to upwards of \$2500.

The area of all the floors in these buildings, is, by measurement, upwards of 100 000 square feet. On the Institute buildings is an insurance for \$15,000.

There are also, at a small remove from the main buildings, two residences, cottage-built, neatly finished; the one containing 4, and the other, 2 rooms.

Within 300 yards of the Institute, on an eminence, is the mansion built by me for the late John La Taste, repurchased by me from his family. This is a highly improved residence. The house stands upon brick pillars about 5 1-2 feet from the ground; the four lower and two upper rooms being well finished; out-houses, &c. in good order.

It is unnecessary to say, that the out-buildings of the institute are, in every respect, correspondent to the main building. The garden has been improved at a considerable expense.

With the above establishment, every way fitted for an extensive Silk Factory, may be had 10,000 Morus Multicaulis trees, 500 of which are 6 years old, all of vigorous growth, which, at the present time, will yield upwards of 200,000 cuttings; they are now regularly planted, 12 feet by 12. 100,000 cuttings, of two and three eyes each, are now being set out, well secured from frost by a ground dressing of long manure.

When the intrinsic value and resources of the above establishment are taken into consideration, and when it is recollected that in one year, from the present time, Columbia will be connected with Charleston by a rail road, now in a vigorous state of progression; when it is, furthermore, recollected, that this rail road is to connect the sea-board with the great north-west, it may be said that the property now offered for sale, presents inducements to individuals or companies, desirous of embarking extensively in the Silk business, unsurpassed by any thing offered in this country.

The buildings, collectively, cost upwards of \$60,000, and the lands, with the improvements bestowed upon them, will command at auction \$25 per acre, and, as it respects the value of the trees, an estimate can be easily made by reference to the prices they are now commanding in the Northern and Middle states.

I will sell the above at two-thirds of the original cost, on the following terms: one-third cash, and the remaining two-thirds payable in one and two years, with interest from time of sale, mortgage and approved security and policy of insurance assigned.

ELIAS MARKS, M. D.

Barhamville, near Columbia, S. C.

I will dispose of 100,000 cuttings (or 200,000 eyes) each cutting to consist of 2 or 3 eyes, hermetically sealed at each end with a composition of beeswax and rosin. Price 2 1/2 cts. per eye, delivered in Columbia. E. M. de 18 6t

SILK AGENCY,

Corner of E. and 7th streets, Washington City, D. C.

The subscriber having commenced an Agency for the purchase and sale of SILK MULBERRY TREES, and all articles connected with the growing of Silk, offers for sale the following varieties of Mulberry Trees at Baltimore prices, viz. Multicaulis, Alpine, Broussa, White Italian and Canton; also Mammoth White Silk Worm's Eggs, warranted to be of superior quality. All the recent publications on silk growing for sale, and subscriptions received for the various periodicals devoted to that subject. no 20 J. F. CALLAN.

A HALF DURHAM COW FOR SALE.

The subscriber has for sale a beautiful fashionable roan half Durham Cow. She is fresh in milk and only 4 years old. Her price is \$75. Applications, post-paid, to be made to

ED. P. ROBERTS.

Who has also for sale several full bred Devons, males and females. oc 2 4t

THE FARMER & GARDENER

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, E. P. ROBERTS AND SAMUEL SANDS—EDITED BY E. P. ROBERTS.

No. 36.

BALTIMORE, MD. JAN. 1, 1839.

Vol. V.

✂ This publication is the *successor* of the late **AMERICAN FARMER** and is published at the office, at the N. W. corner of Baltimore and North streets, over the Patriot office, at two DOLLARS AND FIFTY CENTS per annum, if paid within one month from the time of subscribing, or \$3 if after that time. All letters to be post paid.

BALTIMORE: TUESDAY, JAN. 1, 1839.

ROBERTS' SILK MANUAL.

This work is now ready for delivery. Persons desirous of obtaining copies of it will do well to make early application, as a large number of the edition is already engaged.

Price per single copy, 37½ cts.—to dealers who take 100 copies or more, a deduction of 33½ per cent. discount will be made; to those who take a less number, 20 per ct. will be allowed—terms, *cash*.—It contains 100 large octavo pages.

The friends of the Silk Culture in Maryland, will bear in mind that a *State Convention* is to be held in the city of Annapolis on the 15th day of January instant. As it is particularly desirable that each county in the state should be represented, those who may be solicitous to advance the interests of the cause, will take prompt and efficient measures to appoint delegates. There is no state in the union possessing a better climate or soil for the culture, nor is there one whose necessities more imperiously call for its adoption, and we therefore, sincerely hope, that our farmers and planters will, upon this occasion, come to the rescue with zeal and patriotism, and set an example worthy of the descendants of those sires of revolutionary memory, who in the battle field contended while it was a virtue to continue the fight, and who, when they retreated, did so facing the enemy.

TOWN'S SPELLING BOOK.

A new work bearing the above title has been placed upon our table, and in looking through it we have been very forcibly struck with its merits. The arrangement of the words into syllables are peculiarly happy, conforming as nearly as can be to the most approved method of pronunciation; and the syllables being so marked as to designate the one on which the accent should be placed, renders the task of enunciation easy to the learner. There is another characteristic about the book that pleases us. The *meaning* of the words to be spelt by the children, are given in parallel

columns, so that they not only learn how to spell them, but at the same time acquire a knowledge of their import, so far as it is practicable at the tender years of most learners. This we think a decided improvement upon the plan of most all the primary school books, as it not only teaches how to spell words, but imparts at the same time their meaning; and thus is a valuable idea impressed upon the child's mind at a time when impressions are most apt to be lasting. If common sense had not taught us the value of this part of Mr. Town's plan, the importunity of our youngest son to know the meaning of the words which we give out to him while hearing him his lesson, would have done so; for though we often devote hours to Johnson's folio dictionary, in studying the various bearings of *words*, we confess he has often put us to our trumps, to define those he was spelling in such a way as to make them intelligible to his youthful mind; and whenever difficulties occurred, and we would wish to evade his questions, he would invariably bring us back to a proper sense of our position, and to the reasonableness of his inquiries, by an exclamation of, "Oh! father what's the use of knowing how to spell without knowing the meaning of the words?"—This was a *poser*, which no argument of our's, had we been disposed to use one, could have overcome: it attacked our pride, while it pointed out our duty, and coming from a little fellow, whose consanguinity gave him a right to be gratified, we hammer away from "*absence*" down to the end of the column, and are glad enough in all conscience when his last interrogatory for the night falls upon our ears; for though one may, in his *own mind*, have ever so just a notion of the *import* of a word, it is not so easy a matter to transfer it to that of a child six years of age, in a language that he can understand. So for one, in the inmost core of our heart, we thank Mr. Town for putting this *stopper* upon the inquiries of our little urchin; for verily he has got us out of a most annoying scrape.

Proceedings of the Silk Convention—We have been requested to ask the favor of the editors with whom we exchange to copy the proceedings of the Silk Convention published in our paper of the 18th ult.

LIME AS A MANURE FOR POTATOES.

It is said in many of the English authorities, that lime is an improper substance to be used as manure for potatoes; that owing to the thinness of the skin of this root, it causes it to *blister*, and consequently interferes with its growth. That *hot* lime, fresh and unslaked from the kilns, if placed in large quantity upon the tuber, would from its caustic nature, produce this effect, we do not doubt; but we have always repudiated the idea, that lime, as generally used on land in this country, could exercise an injurious consequence to the growth of potatoes. How is it possible that 50, 100, or 150 bushels of lime spread over the surface of an acre of ground, and harrowed lightly in, can by contact, after passing through the operation of slaking by air and water, as it necessarily must, in its descent to the potatoes, produce any such effect? The thing is absurd in itself. We all know, that by analysis, it requires six hundred times its own weight of water to hold lime in solution, and common sense teaches us, that the quantity of lime, which is thus separated from the *mass* spread on the earth, and which finds its way downwards to the growing roots, are so mingled with earthy and dead vegetable matter as to be rendered harmless. And hence the only rational supposition is, that its action when it does reach them, will be merely stimulative to the dead vegetable matter, and serve to convert it into nutriment for the living plants. Potatoes, we all know, require a large amount of undecomposed manure, to make them grow vigorously and yield abundantly; that from the rankness and succulence of the vines they require a continuous supply of nourishing food. That being the case, it follows, of course, that the *raw material*, which is generally used as manure for potatoes, will be improved by the addition of some body calculated to excite its decomposition, and convert it into a condition capable of yielding the nutriment so indispensable to the healthful growth of the potato. This opinion, after much reflection, we formed, long since, and acting upon it last season, were gratified to find that, although our patch of potatoes proved almost a failure, that that part of the ground which had been *limed*, in addition to manuring, (which was alike in all parts) yielded more and better potatoes than the other portion

where the lime had been used; that the vines kept green longer, and as well as the tubers, attained a larger size. Our own experience then, has convinced us, that the idea, that the lime is an improper substance to be used on ground whereon potatoes are grown, is by no means a sound one, and we are happy to find that we are sustained in our views by Mr. John Ide, an intelligent farmer of the state of Vermont. He says in a letter to the editor of the Vermont Telegraph:

"Respecting the use of lime in raising potatoes I can make no accurate statement—as I was not at home when my workmen commenced digging those that were limed; but as near as I can calculate, I obtained something like 100 bushels more for making use of about six bushels of slaked lime, in the following manner. I had about half a pint of lime placed in the hill, and had the potatoes pressed down gently with the feet before covering. I was led to try the experiment by seeing the effect produced by some lime that had been used in a tannery, being put into the hills of some potatoes."

New-Year's Day—This being the beginning of a new year, we tender to our subscribers the compliments of the season, and trust in the fullness of our hearts that they may live to enjoy many returns of the season, and that they may never come without finding them in the possession of health, happiness and prosperity. May good and fruitful crops crown their labors, and every revolving year find them in the enjoyment of those grateful feelings towards that kind Providence, who watches over the destinies of man, which render him worthy of earthly blessings, and prepare him for a state of eternal life.

While the farmer and planter pours out his gratitude to the Author of all perfect good for crowning his labors with success, let him not forget that kindness to his domestic animals is as much his duty as its performance will prove his interest—that in proportion to his attention in feeding them well and keeping them warm will they increase in value.

SUGAR BEET FOR MILCH COWS.

An intelligent gentleman from the eastward, assured us a few days ago, that by giving his cows a peck of sugar beet twice a day, cut up with their hay, he was enabled to get just as rich milk and butter during the winter, as in summer, when the pasture was at its best. Now as an acre of ground well manured, planted in this root, and well attended, would yield beets enough to keep ten cows from the 1st of November till the 1st of May, should not every farmer make his arrangements for planting beets next spring. From our

own experience, we have no doubt, that this addition of beets to the ordinary feed of the cows, would make a weekly difference of 2 lbs. each in their product of butter. From the 1st of November to the 1st of May, there are 26 weeks. This number of weeks at 2 lbs. additional butter, would give us 52 lbs. for each cow during the period named, or 520 lbs. for the 10 cows, and if we set down the butter as being worth 25 cents per lb., it will give us \$130 as the value of additional yield brought about by the feeding with the product of an acre in beets. But this is not all,—the proprietor of the cows, in the spring, would have the gratification to know that he had treated his animals well, and the satisfaction of seeing them in good condition.

REMEDY FOR SWELLINGS OR SNARLED BAGS IN COWS.

Cows soon after calving are subject to have swellings or knots in their udders; this is more particularly the case with heifers with their first calves. It sometimes proceeds from colds contracted prior to calving, and at others from the inability of the calf to extract all the milk, which throws the cow into a feverish condition, and the formation of indurated surfaces consequently follows. Should fever accompany these lumps, a little cooling medicines will be proper, as a solution of half a pound of *epsom* or *glauber salts* in a drench; to be followed with good nourishing messes, say one peck of bran and half a pound of linseed meal, to be first boiled and given warm, morning and night, for a few days. To reduce the swelling in the udder the following recipe will be found excellent:

Take a handful of *rue*, and the same quantity of the seed of *wormseed*, bruise them both well, and put them into a skillet or other vessel, with a pound of unsalted butter, fresh from the churn; simmer the whole well over a slow fire for an hour; then strain the mixture through a sieve, or linen cloth, and you have the best ointment that can be applied. Let the inflamed and hardened parts be gently anointed three times a day with the hand, and in a few days the cure will be effected, if this remedy is applied in time.

Care should always be taken before the calf is turned to the cow, for several days after she has calved, to let the *dairy-woman* draw off a portion of the milk; by so doing you are sure that the calf will extract the rest; by thus emptying the cow's udder, you will prevent the ill consequences which ensue where a part of the milk is left in the bag, to produce fever and snarls.

Hollow Horn.—This disease in cows, may be prevented, by putting, once a fortnight, during the inclement weather of winter and spring, a teaspoonful of spirits of turpentine in the cup or cavity just behind the horns.

A surer preventive, however, and one more consonant with the feelings of humanity, is this—*feed them well, and keep them warm.* Cows that are well kept and housed, do not have this disease.

From the American Silk Grower.

SILK CULTURE.

Having fed a small number of silk worms the past season, and having, as I suppose, succeeded well, I send you a brief account of my fixtures, feeding, &c. If you think my experience will in the least degree aid the good cause in which we are in common engaged, you are at liberty to publish it. My cocoonery is 36 feet by 18; two stories high, lathed and plastered, with a chimney in each end, and a cellar under the whole. The building is substantial and well furnished. It has 28 windows and 5 doors, with blinds and Venetian shutters. The building was intended to be converted into a dwelling in case it was not used as a cocoonery.

Two rows of shelves, the whole length of the building, were put up, each shelf one foot above the other, so that I had large aisles between the rows of shelves, and around them, affording ample room for feeding the worms and changing the hurdles. My hurdles are three by four feet, made with cotton twine, knit, but crossed as a bed cord. I supposed I had accommodations for feeding 2 or 300,000 worms hatched in succession. I accordingly procured two ounces mammoth white eggs, from Mr. Stone, of Burlington, which were understood to come from Germantown, Pa., and several ounces of sulphur colored, from Mr. Comstock, of Hartford. These were all put in glass jars, and placed in the ice house about the 1st of April.

The 15th of June, the mammoth white were taken out and exposed for hatching, and in a few days, about 5250 of them hatched, which was all I obtained from the two ounces. I then exposed those I obtained from Hartford, not one of which hatched. Disappointed in my eggs, I called on Mr. A. M. Jerome, of Princeton, who supplied me with eggs which were in the process of hatching. These I brought home on the 26th of June, and about 25,000 of them hatched. I had then altogether about 30,250 worms. I placed them all on the shelves in the second story; about 12,000 on one side of the room, and the balance on the other side. I fed the whole on the multicaulis, grown from roots and cuttings planted this spring. During the whole time of feeding, the temperature ranged very high, being several days as high as 93 degrees Fahrenheit, and seldom less than 72 degrees.

When I commenced, all the knowledge I had on the whole subject was "book knowledge." I had never seen a cocoonery, and never but once had seen worms feeding. My colored man, who had never seen worms, gathered the leaves and fed the worms until within about two weeks of wind-

ing, when I employed an aged man to assist him.—Having some leisure, I spent considerable time in the cocoonery, determined to watch the feeding with care. A premium of \$100 having been offered by the Monmouth Silk Manufacturing Company, to the person who would raise the greatest number of pounds of cocoons from the sixteenth of an acre, I measured the above quantity of land, and planted it with roots set upright, the rows eighteen inches apart, and the trees eight inches apart in the rows. The 12,000 worms above alluded to I fed on the premium trees. The drought continuing so severe, and fearing the leaves on the premium trees would fail, on the 19th of July I took off about 5000, for which I borrowed leaves to carry them through. From this time it required 143 pounds of leaves.

In about twenty-six days the mammoth white began to rise, and in about 31 days all, or nearly all, had risen. On the 28th day a few of the sulphur began to wind, and by the 35th day, all had wound. As a general rule we fed four times a day, never at night. After the second week we changed the hurdles every two or three days; the room was well ventilated, and always sweet and clean,—although good attention was given to all the worms, yet a little more attention was given by myself to the premium worms. They were fed just as often as they consumed the leaves previously given, and the difference in the size of the cocoons was obvious, the premium cocoons being very perceptibly the largest and most firm. The whole number of pounds of cocoons from the worms fed as above, was 86 lbs. 9 oz; the whole number of pounds fed on the premium trees was 38, or if an allowance is made for borrowed leaves, allowing 21 pounds of leaves to a pound of cocoons, the number fed on premium trees would be 31 pounds, 14 oz. Of the mammoth white it required 350 cocoons to make a pound; of the premium sulphur cocoons 290 to 300; 192 of the largest, after the floss was taken off, made a pound; of sulphur colored cocoons, not premium, it required about 325 to make a pound. The worms were vigorous and healthy during the whole time of feeding. I think remarkably so; indeed I do not know that I lost a single worm by disease. Being a healthy crop, I saved most of my cocoons, for eggs, and I have about four pounds of the finest eggs I have ever seen. I stifled, probably, 25 lbs. of cocoons in order to make a specimen of sewing silk.

August 4th, I obtained a small paper of two crop eggs from Wm. Imlay, Esq., of Allentown; only 300 or 400 of them hatched, which I fed on my premium trees. These were also healthy and vigorous, but they did not wind under 30 days, and the cocoons were small. Owing to the impossibility of procuring eggs to hatch in successive crops, I have only raised 31 lbs. 14 oz. from my 1-16th of an acre, though my trees are smaller than yours in Burlington. This, I believe, is not more than one half the amount I could have fed if I had been able to procure eggs and hatch them as wanted. The trees do not appear now to have lost any of their foliage. Enough has been done, however, to show that raising silk is profitable even the first year, in the hands of the most inexperienced. I hope you will write an article on this subject, and from what has been done, show what can be done. From experience, I am perfectly

satisfied there is no mystery or difficulty in feeding the silk worm. If the eggs are from a healthy crop, and if the worms are kept clean and well fed, success is certain, and from the acknowledged enterprise of our people; I am perfectly satisfied the silk business will succeed, and at no distant period will become a source of vast national and individual wealth. May your valuable publication aid, as I have no doubt it will, in hastening this, inducing our intelligent farmers and others to engage in the business.

Yours truly,

R. V. M'LEAN.

Freehold, N. J. Sept. 20, 1838.

From the Yankee Farmer.

QUICK-LIME.

AND OTHER CALCAREOUS SUBSTANCES AS
A MANURE.

[We would refer our readers to the former part, as it is necessary to observe the connexion, this part of the section was omitted for want of room.]

When the reservoir was nearly full of this fine powder, the work was stopped, the water was drawn off from the reservoir, by taking out some plugs left for that purpose, at different heights, till all that was clear had run off, the powdered stone was afterwards thrown out to the bank, and allowed to dry sufficiently for use.

I have heard that a mill, upon these principles was erected by the Honorable the Trustees for managing the forfeited estates in Scotland, and that a good deal of lime-stone was pounded with it. But, as it was erected in the Highlands of Scotland, where roads were bad and where there was but little spirit for improvements in agriculture; as there was no public demand for the manure, after the experiment was sufficiently tried to show that it might be practised with advantage in other places, the mill was suffered to lie unemployed.

But although this may be considered as a most valuable discovery for those who may have a good lime quarry so situated as not to be within the reach of any kind of fuel for burning lime-stone; yet, to such as can obtain fuel at a moderate expense, there can be no doubt that burning is the easiest and most efficacious mode of reducing lime-stone to powder that was ever invented, and therefore ought always to be adopted where necessity does not prevent it.

Reducing lime-stone to powder by calcination, is attended with this farther advantage to the farmer, that it considerably diminishes his expense of carriage. Pure lime-stone loses about two-thirds of its weight by being thoroughly burned; so that the man who is obliged to drive this manure from a great distance, will find a very considerable saving by driving it in the state of shells. But if it were reduced to a powder by mechanical triture, he could not be benefitted by this circumstance.

Many persons choose to drive lime-stone from a considerable distance, and burn it at home: But it is obvious they then subject themselves to a very heavy charge in carriage, which would be avoided by an opposite conduct.—This, therefore, ought never to be practised but where other circum-

stances may counterbalance this unfavorable one.

But as lime-stone is often in its native state mixed with sand in various proportions; and as sand loses nothing of its weight by calcination, it must happen, that those kinds of lime-stone which contain the largest proportion of sand will lose least in calcination, and of course afford the weightiest lime-shells.

Hence it is obvious, that those who are under the necessity of driving lime from a great distance, ought to be particularly careful to make choice of a kind of lime-stone as free from sand as possible, and to drive it in the state of shells; as they will thus obtain an equal quantity of manure, at the least expense of carriage that is possible; and the lightest shells ought, of course, to be always preferred.

When lime is slaked, that which contains most sand falls most quickly, and absorbs the smallest proportion of water. What is pure, requires a very large proportion of water, and is much longer before it begins to fall.

Hence it happens, that those who drive sandy lime shells in open carriages, must be very careful to guard against rain; because a heavy shower would make the whole fall, and generate such a heat as to be in danger of setting the carts on fire; whereas pure lime-shells are in no danger of being damaged by that circumstance. I have seen a cart loaded with such shells, which had been exposed to a continued shower of rain, as violent as is ever known in this country, for more than three hours, and seemed hardly to be affected by it in the smallest degree. I ought to observe, however, that my experiments were confined to only one kind of pure lime, so that it is not from hence demonstrated, that all kinds of pure lime will be possessed of the same qualities.

Lime shells formed from the purest lime-stone, required more than their own weight of water to slake them properly;* whereas some kinds of lime-shells that contain much sand, do not require above one fourth part of that quantity.

Hence it is much worse economy in those who have pure lime-shells, to slake and carry them home in the state of powdered lime, than it is in those who have only a sandy kind of lime-shells.

*I have found, by experiment, that pure lime-shells cannot be slaked with less than about one-fourth more than their own weight in water. When slaked in the ordinary way, the same lime shells took more than double their weight of water.

From the Cultivator.

LAKE COUNTY, IA., 6th Oct. 1837.

TO HARVEST BEANS.

The following easy and simple method of saving a crop of beans, is the price of ten years subscription to the Cultivator, to every person that never practised it, who wishes to cultivate that valuable crop. By this method, beans may be planted in a field by themselves, may be pulled while the vines are entirely green; and will be perfectly cured, no matter how wet the weather; and what is more, need not be housed or thrashed until such time as may be convenient. This is the plan.

TO CURE BEANS.

Take poles or stakes (common fence stakes) in to your bean field, and set them stiff in the ground, at convenient distances apart, which experience will soon show you, and put a few sticks or stones around for a bottom, and then, as you pull an arm full, take them to the stakes, and lay them around, the roots always to the stake, as high as you can reach, and tie the top course with a string, or little straw, to prevent them from being blown off, and you never will complain again "that you cannot raise beans, because they are so troublesome to save." They are the easiest crop ever raised, to take care of. Try it, and you will then know it, and thank me for telling you of it.

Your friend,

SOLON ROBINSON.

PROGRESS OF PHYSICAL SCIENCE.

TRANSLATED FOR THE JOURNAL OF THE FRANKLIN INSTITUTE, BY J. GRISCOM.

On the part which the Soil acts in the process of Vegetation. Memoir read at the Academy of Sciences, by J. PELLETIER.

(Concluded.)

The merit of a theory is that it accounts for observed facts, enables us to foresee what will take place under particular circumstances likely to happen, and indicates the considerations which it may be desirable to bring about with a view to useful results.

Let us enquire whether the theory now presented fulfils these conditions:

Suppose a chalky soil. To improve it we add argillaceous marl; i. e. to the lime which predominates we add silica and alumina. *To the positive element which we found alone, we add the negative elements which we found deficient.*

Will it here be said that "chalk is so compact that the roots cannot penetrate it, or so split up that water passes through like a riddle, and that the marling is simply designed to change this physical condition?"

But, if the object was merely to divide the chalk, in order to change its physical condition, a calcareous sand would accomplish this object, and yet it never came into the head of an agriculturist to improve his chalk by limestone, while Gordan de Saint-Memin produced a magnificent vegetation by a mixture of chalk with heath sand.

In a piece of ground belonging to Chaptal, the soil was clayey and rather barren; below was a layer of black earth. Chaptal, went to work empirically, dug up the ground and mixed the two beds together. Contrary to his expectations, the sterility was increased. It was not till the fifth year that the ground acquired a common degree of fertility, that is, when all the iron had passed to the state of peroxide, and the land, black as it was, had become of a deep bright yellow. Chaptal asks, if in this case the black oxide is injurious to vegetation, either by itself, or in reference to the oxygen.

In our theory the fact explains itself, and might have been foreseen:—the black oxides of iron (fer oxidule d'Haiiy) is a combination of protoxide and sesquioxide of iron, a substance indifferent in relation to silica and alumina. Exposed to the air the combination is destroyed, the iron pas-

ses to the state of peroxide, susceptible of union with silica and alumina. Yet, under such circumstances it was not worth while to mingle the two beds, since five years were lost in attaining a common degree of fertility.

The theory which we have adopted is applicable likewise, in the happiest manner, to the operation called marling. Marl is not a simple mixture of silica and alumina with more or less of carbonate of lime. Its base is argillaceous and calcareous silicates; some mineralogists consider it even as an oryctognosaical species.* It is on this account that plants cannot vegetate in marl which has not been long exposed to the air, even when the silica, alumina and lime are in the proportions which form good arable land. By exposure to the air, carbonic acid destroys the combination which existed between the earths, and it is then, and then only that marl will enrich the soil. In this case, if the negative element prevails, as in the case of argillaceous marls, it becomes excellent for calcareous soils; and marls called calcareous are in their turn advantageous for argillo-sandy land.

It has been remarked that the alkaline and earthy salts, which, in a certain quantity, injure vegetation, produce a good effect when employed in small doses. Chemists and farmers have sought to explain this action of saline compounds. Some have thought that certain salts were good for plants, as some are for animals,—that salts, and even earths, formed part of the food of vegetables; others, on the contrary, that they act principally as stimulants to vegetation. Without denying that earthy substances may enter into the constitution of a vegetable, to unite and give strength to the parts that are to support the organs, like phosphate of lime in the bones of quadrupeds, I may remark, that with a few exceptions, the presence of any salt is not absolutely necessary to vegetation. Thus, for example, borage and lettuce, whose extracts contain much nitre when they grow in highly manured soils, do not contain any sensible portion of it when cultivated without dung. I therefore, rather incline to the opinion of Physiologists, who think with M. Decandolle, that salts act as excitants or stimulants. But, what is the meaning of excitation? At the present day, science no longer admits of those vague explanations which consist of nothing but words. I understand by excitation, the eminent property of conducting electricity which salts communicate to water. It is in this manner, as it appears to me, that nitrate of potash acts, in the prodigious energy which it gives to vegetation. It is probably in this way that sulphate of lime acts—that is to say, by rendering the water a better conductor, though in this case the effects appear to me to be complicated, and to be worthy of direct experiment.

Thus far, for greater simplicity, we have considered lime as free, in speaking of the mixture of silica, alumina, and lime, which constitute a soil; now the lime is in the state of carbonate, but it does not in that state cease to be an electropositive element in relation to silica and alumina. This circumstance allows us to explain an important vegeto-physiological fact. The carbon in vegetables is produced, mostly, if not entirely, by

the decomposition of the carbonic acid which they absorb not only from the air, but from the ground; such is the opinion of the celebrated Decandolle. This carbonic acid, furnished by the ground, appears to enter into the vegetable at the moment of its liberation, probably dissolved in the water which the soil contains. It is absorbed by the spongioles of the radicles; it ascends with the sap, urged forward as by a *vis a tergo*. But how is this carbonic acid produced? In certain manured soils, and in superficial portions of the earth, penetrated by the air, we may conceive it to be formed by the re-action of oxygen upon the carbon of organic detritus; but at those great depths which are attained by the roots of oaks and cedars of a hundred years old, how can the carbonic acid be developed? How can the oxygen and organic matter penetrate to such depths? In our theory there is no difficulty. Carbonic acid comes from the lime, on which the silica and alumina act slowly but continuously to form silicates.*

Thus then, at certain depths, and under influences but little understood, silica would decompose carbonate of lime, while at the surface of the earth, and under the influence of exterior agents, the silicates would be decomposed by carbonic acid produced by the re-action of the oxygen of the air on organic detritus,—an admirable and providential rotation, which re-establishes the equilibrium, and incessantly tends to the rejuvenescence of nature.

The last corollary of my theory,—the decomposition of silicates by exterior agents, and particularly by carbonic acid, cannot be called in question. It has been established by M. Cécquerel, under circumstances in which the force of cohesion might seem to present a serious obstacle. I allude to the decomposition of the feldspar of granite, and the formation of kaolin. The analogy is here so strong that I must render the homage of my first conception to the distinguished academician I have just cited.

The fact of the decomposition of carbonate of lime by silica in the interior of the earth is equally supported by experiment and observation. And first, if, in proceeding to the analysis of a vegetable soil, when the coarser siliceous sand has been removed by weak acids, we examine the finer terrene substance which has resisted the weak acids, we find that it is not alumina, as Chaptal indicates, nor silica, as is stated in various works, but that it consists principally of veritable silicates of lime, of alumina, and of oxide of iron.

Still, it may be objected that these silicates are anterior to all vegetation; that to prove their recent formation and daily production, requires direct experiments. These direct experiments are among the objects which I wish to undertake. They require much time. But to prove truth, are we to depend solely upon new experiments

* Animal manures may contribute to the decomposition of silicates, not only by the carbonic acid which they form by absorbing oxygen from the air, but in producing such substances as the *fat acids*, which have a tendency to unite with lime and to eliminate the silica which is combined with it. M. Raspail, whose talents we are glad to acknowledge, without sharing in all his scientific opinions, appears to us to have explained the siliceous petrefactions that are found in chalk, in a very happy manner by the action of animals entombed in siliceo-calcareous beds. (Physiol. Vegetate t. 2, p. 339.)

* G. Diet. d'Agriculture, article Croix.

* Brochant's Mineralogy

peculiar to him who advocates it, and are we forbidden to rely on the labours of our predecessors? Certainly not. I may therefore again refer to the interesting researches of M. Becquerel, and bring into view those mineral species which he has formed in his laboratory, and which present all the characters of their natural congeners. Neither can I omit to mention the important fact of the artificial formation of feldspar by Cagnard de Latour.

There is still another objection which may be made to the theory now presented. If in this mixed state, the earth acts by virtue of electro-chemical forces, why are three earths requisite to the construction of a good soil? Ought not silica and lime, or lime and alumina to be sufficient to produce, in each element of the mixture, an opposite electricity? It is easy to answer this objection also, by a reliance upon facts well known to mineralogists: it is certain that the binary silicates are more rare in nature than the ternary silicates, and that their mass in particular is less powerful; silica has therefore a greater tendency to combine with lime and alumina together than with either of these earths separately. Hence we may perceive that the union of the three becomes necessary to constitute a soil endowed with the highest degree of vegetative power.

If the ideas which I now submit to the Academy appear to deserve any attention, I propose, on the return of the favorable season to renew the enquiry, and to devote myself to the labour of positive experiment,—experiments, which, whatever may be their results in reference to my theory, will at least have the advantage of eliciting facts which may be friendly to agriculture, that science which is so prominently stamped with the character of utility.

Jour. de Pharmacie.

From the Plymouth Memorial.

WHEAT.

MR. PRINTER—Your readers will recollect reading in your paper some time last spring, sundry articles in which the question was fully discussed, "Is it best for the farmers of Massachusetts to sow wheat or plant Indian corn?" Not being satisfied with theory, I resolved to test the question by practice; and falling in with a friend of mine, who seemed to be a little touched with the wheat fever, I agreed with him that he should faithfully try an experiment by cultivating wheat, and I would as faithfully try my luck with Indian corn. The object of troubling you now, is to give the result of both experiments to the public, and let each reader make such comment as shall best suit himself.

On the 5th of May last I commenced ploughing an eight acre field, in addition to my usual ploughing, that the experiment might not interfere with the rest of my farming. I paid cash for all the labor, and gave the current price for my laborers' services. The field had not been ploughed for fifteen years, had never been manured, nor used for and other purpose than raising corn and rye once in eight or ten years, and for pasture when not cultivated. I put no manure on it and planted it in the usual way, making the rows of corn run both ways, about four feet apart, and putting four kernels in a hill. The worms and

birds troubled it some and I planted the missing hill with beans, and the result follows:

Dr.—To ploughing eight acres,	\$24,00
Furrowing,	1,50
Planting,	8,00
Seed corn,	1,25
Scare crows,	1,00
Cultivating both ways,	3,00
Hoeing,	18,00
Cultivating 2d time,	3,00
Hoeing 2d time,	10,00
Hoeing in rye,	20,00
Cutting stalks,	8,00
Harvesting corn,	40,00
Do. stalks,	2,00
Do. pumpkins,	1,00
Do. beans,	25

\$141,00

Deduct half last hoeing as belonging to rye crop, 10,00

\$131,00

Cr.—By 250 bushels sound corn,	\$150,00
25 do small corn,	12,00
800 pumpkins,	25,00
4 tons stalks,	40,00
Husks and butts,	30,00
Beans,	2,50

\$360,00

Deduct expenses, 131,00

Profits, \$229,00

My friend selected an acre of meadow ground, which had been planted the year before, and he manured it heavy with good manure from his stable and pig pen, and the whole expense of ploughing, sowing seed, and manuring, calling the manure one dollar a load, was \$53,00.

This wheat was the best of any in town; he harvested, and measured it with care, and found he had thirteen and a half bushels.

As wheat has no established price in this place, each one must cypher out the profits for himself.

Perhaps I ought to remark that the season has been favorable for Indian corn, and unfavorable for wheat; but I shall continue my corn experiments from year to year, and hope the sowers of wheat will do the same, and give publicity to the results—it is desirable that every farmer should know what his neighboring farmers are about. Real improvements should be seized upon and put in practice; but we ought to beware of theories until they have been well tested by experiment. The loss of a whole crop to a farmer is a serious matter, therefore if any crop be doubtful he should plant but a part of his field with it. Such as are not able to lose should scatter their chances. My present impression is, that upon sandy land, no crop is so certain, upon an average of many years, as Indian corn. If I find myself mistaken I will tell the public of it.

SYLVANUS BOURNS.

Indian Neck Farm, Nov. 16, 1839.

EARLY LAMBS.

Farmers in this country have, hitherto, in order to avoid the care necessary to rear lambs yeaned as early as January or February, and the less con-

sequent on want of attention, endeavored to have their lambs dropped at as late a period as could be, and they attain sufficient strength and hardihood to endure the following winter. In this way, with the ordinary mode of treatment, more lambs are saved than would be were they to come at the early period named; but they are not the second year worth as much to the butcher, and their fleece will be lighter than if dropped early. Still, unless more food calculated to cause ewes to give a supply of milk, such as turnips, rowen hay, or other nourishing food, be provided; and the difference in price between early and late lambs is no more considerable than it now is, perhaps the present course is the best. But from the increasing inquiries made in our markets for early lambs; the more general consumption of mutton of all kinds among the people generally; and the better prices that heavy, early lambs, now command, we are induced to believe that with a little precaution, farmers who have flocks of the hardier kinds of sheep may find it for their interest, to make the breeding of early lambs a part of their business. The time required, falls at a period when it is little available as a source of profit in any other way, and might perhaps be made of account in this. To show how the business is managed abroad, we make the following extract from the Quarterly Journal of Agriculture, detailing the process as it is practised extensively in the county of Wicklow, for the Dublin market.

"The flock of the lamb farmer consists almost uniformly of 100 ewes, kept as well as his pastures will admit of. Amongst those eight or ten rams are put in the beginning of June. Many of the ewes will impregnate by the end of July, it being natural to this kind of sheep to take the ram at an early period, and this tendency on their part, becomes periodical; so that much better chance of early lambs is had from being in the habit of breeding them from those untied. If, after this month, any ewes seem not to have been tupped, the anxiety of the farmer to obtain the high prices of the early market, suggests the expedient of hurrying the flock about the barn or a small enclosed yard, till they are considerably heated and fatigued, at which crisis a number of rams are introduced, and the ewes treated in this manner, in most instances, present the farmer, in the month of January, with the expected result of his experiment.

"The lambs at a fortnight old, are separated from the dams, and placed in small pens in the lamb house. This is by some constructed in three apartments; one divided into pens for lambs of different ages, the other two communicating with this, and also with the farm yard; the one to receive the dams of the lambs that are in the pens, the other to receive the dams of those that have been sold off.

"Into these two divisions the ewes, as here distinguished, are respectively driven twice a day. The dams of the lambs sold off; or, as they may be termed, the nurses, are brought out separately, and held for the lambs to suck them. They are then put away, and the lambs are let into the adjoining apartment to their own dams. While the lamb is very young, it is incapable of using much milk, and the ewe will it is likely afford sufficient for its sustenance; but as it increases in strength, assistance from the cow becomes necessary, and,

beginning with a quarter of a pint each lamb, before it becomes sufficiently fat, will come to use more than a pint of cow's milk at a meal, and that twice a day, exclusive of the milk of the ewe. The regular practice is to divide the twenty four hours by four equal periods, and to feed the lambs with ewe's and cow's milk alternately, at intervals of six hours. This for the time requires constant attention, night and morning, and on that the success of the feeding principally depends. This attention must be directed to another object also, as well as their feeding; unless great cleanliness and regular warmth is particularly observed, the lambs will never thrive.

"The best lamb feeders have board floors to their pens, contrived to let all moisture pass through, and be drained away, so that the lambs lie always dry and warm, upon wheat straw, which is preferred to any other for this purpose. At about 6 weeks old, or sooner, they are fit for the butcher, and produce, according to the time of sale, from 20s. to two guineas and a half a piece, (from \$4 44 to \$11 80.) The lowest prices take place late in the season, when the ewes have plenty of grass, which increases their milk, and renders the assistance of the cow unnecessary; but at the early season, when the ewe's milk would be so valuable, it is unaccountable that some greater exertion is not made to supply them with turnips, or other artificial food, which would preclude the necessity of encroaching upon the dairy, at least to the present extent. The foregoing method, includes all the rules observed by the chief farmers in the lamb trade,—a practice which has caused much wonder, and the success of which has been imputed to such various mysteries, but, except in the contrivance of the barn, which is certainly made use of, the whole is comprised in regularity and cleanliness."—*Genesee Farmer*.

From the *Genesee Farmer*.

THE MILK SICKNESS, OR

PUKING COMPLAINT.

MR. TUCKER.—I promised, some weeks ago, to give you a brief sketch of the "Milk Sickness, or Puking Complaint," as it is called, that prevails in the West in many places. There never was a disease in any country, where there were so many conflicting opinions respecting the cause. This disease is fixed in the stomach; a fiery burning sensation in the lower region of the stomach, accompanied with a constant desire to puke—the glands are affected; and as the bowels become torpid from the poisonous matter making a lodgment on the stomach and destroying not only the coats of the stomach but affecting all the digestive powers, it is almost next to impossibility, in an advanced state of the disease, to procure a passage from the bowels. The cattle that have been opened present what is called the "Manifold," with its contents as dry as a chip; a part of the substance taken as a nourishment digested, other parts again remaining as when first deposited; the whole region of the stomach having ceased to act! This, in animals produces what is called the "Trembles." The animals may live for weeks in this state, if not entirely overcome; but the attacks, in many instances, are not discernible until there is sufficient action or exercise to produce a circulation of the blood, when the poison diffuses itself

throughout the whole system, and soon destroys the animal, and those of the canine or vulture race that prey upon the carcass are destroyed also.

NARRATIVE.—The first persons in the West, that fell victims to this dreadful disease, were Mr. William Tompkins, an emigrant from my father's neighborhood, (Harwood county, Va.) and a Mr. Bernard Fowler, brother of Maj. John Fowler, who for many years was the only member of Congress from Kentucky, when that State was entitled to one Representative only. The two persons were neighbors, and lived on Bank Lick Creek, a branch of Licking River, which empties into the Ohio, directly opposite to Cincinnati.—They died about the year 1794 or 5. The disease frequently prevailed about the forks of Licking as the country was settled—on Raven Creek, another branch—on Eagle Creek, a branch of Elkhorn. The next we heard of it was in divers places in the Green River Country, so called, the southern part of Kentucky; frequently in divers other places.

As Ohio began to be settled in 1798, '99, and 1800, up to the years 1826, 7 and 8, this disease made its appearance on the Miamis—on the waters of the Scioto, particularly on some of the branches of Point Creek. Becoming a resident of Ohio in 1806, I discovered that the Rattlesnake Fork of Paint Creek, and the upper part of Big Darby Creek, were places most affected with it. Some places on Deer Creek, particularly within four or five miles west of London—also places on Mad River, vicinity of Springfield and Urbana. It again was found in different settlements towards the Muskingum; not confining itself to the flat regions of the Miamis, Scioto and other places, it had fixed itself in the hilly regions of Kentucky, on Licking and its tributary streams, and in like manner in the flatter region of the Green River Country. So it was in Ohio; some portions of the rolling region of country of Hockhocking and of the Muskingum rivers, were afflicted with it also; and it has been subsequently felt in different parts of Indiana and Illinois.

THE CAUSE.—Like others, for many years, my mind was bewildered as to the cause of this dreadful disease. My business leading me to visit every region nearly of the country in Ohio, I felt great sympathy for the afflicted, and an ardent desire to detect the cause. In 1807, I think it was, Col. Robert Rennick, then living on the present site of Springfield, Ohio, an emigrant from the South branch of the Potomac, in Virginia, and a great cattle raiser, began to try experiments. His cattle took it, and he effected a cure by giving to each steer a bottle of whiskey, about a quart. Indeed *Captain Whiskey*, in those days, was almost a *King cure-all*. But his remedy, in some instances, failed. He then turned out his cattle, let them range over the prairie and timber lands, and as the frost had nipped the green herbage, he followed his cattle to the timber lands, where he found them greedily stripping the foliage and browsing on a stubby and running vine: after eating this, and on returning home, the cattle took the "trembles." We have frequently springs running from high banks into large streams, collecting from the savannah's banks, or from beds of vegetable or mineral substances, or the earth, poisonous matter; but this, I was satisfied, was not the cause of what

is called the Puking Complaint, or Milk Sickness; for where it prevailed most, there never was purer or more wholesome water issuing from our mother Earth. To Col. Robert Rennick's vine, I then began to direct my attention, and full 25 years were spent in making researches, and trying experiments, and to go into detail would be too tedious and unnecessary. I found it necessary to lay all theory aside, and to go on facts.

FACTS.—1. About 1816, a man living in Indiana, on the Ohio river, bruised the vine, extracted the juice, gave it to a cat, and it killed it.

2. The vine grows in every region where the Milk Sickness or Puking Complaint prevails. Where the vine is not to be found, there is no disease of this nature. This is a stubborn fact!

3. Calling to see a friend living on Darby Creek, in Ohio, whom I had not seen for twenty years, (Mr. McCloud,) in 1832 or 3, he pointed to his wife and remarked:—"She is my third wife, I am her third husband; and in yon grave yard lie 15 of our families taken off by the dreadful disease, the Puking Complaint!" And do you know the cause, said I. "Yes, we have found it out; it is partly a shrub, which, coming in contact with trees, ascends as a vine. I followed my cattle, found them eating of it, and soon taken with the Complaint, and some unable to reach home." This awful, astounding fact, having before fixed on the vine, led me to make a full disclosure in the papers, which set many doctors, both mineral and steam, by the ears.

4. While the doctors were discussing the subject, and some of them calling my facts in question, a warm friend of mine, John McNeil, esq. of Frankfort, Ross county, Ohio, a very extensive farmer and grazier, determined on satisfying his own mind, sent out his son to purchase the healthiest steer he could find in the neighborhood, and to get a good one, paid thirty dollars for it; he gave the steer the vine, as he informed me; he ate it, and the next morning the steer was found dead.

5. Two purchasers of cattle, Messrs. Harold, and Harrod, living in the corners of Clark and Fayette counties, on the head waters of the Little Miami, I think, had purchased about 120 head. The drove was divided, 60 were placed in a meadow that had been kept clear of shrubbery and vines, and 60 put into an adjoining enclosure, taking in some woodland. The cattle were fed on the same hay and watered from the same well—most of the 60 enclosed in the woodland died. It was winter; snow was on the ground; it was discovered that these cattle had eaten the vine down to the very roots! So this was a *stubborn fact*.

6. A man not far from the same vicinity, by the name of Allen, had a horse that broke out of his enclosure, and ran off into the barrens; he trailed him up, found him browsing on the vine, and that he had eaten a considerable quantity of it. Being vexed at the animal, he caught and mounted him, and rode him home at full speed; this heated the blood of the horse, he took the "trembles," and died!

I could still proceed with statements of facts of like nature; but will in place thereof give—

VOUCHERS.—The following papers a few minutes ago I laid my hands on, by overhauling some old papers. They have been before published in Ohio, but are now taken from the originals:

I hereby certify that my father settled upon the waters of Mad River, about the year 1801—that in harvest the cattle took the 'trembles'—that the country was settled some time before the cattle took the 'trembles'—[range first eaten on]—before this the 'Puking Complaint' was not known among the people—that in cases of cattle having the 'trembles' and dying, the manifold of the paunch was dried up—that believing the complaint to be caused by a poison vine, we looked for it, took some of it, and gave it to a calf, and the next morning, (after eating of it,) it took the 'trembles'. My father and myself chewed some, and it caused the water to run from our stomach, and we were seriously affected by it; we did not swallow the juice. No one in the country believed it to be the water that caused the Milk Sickness. The vine described by Mr. Th. S. Hinde is the vine referred to by me.

W. TAYLOR.

Champaign Co. O. Aug. 19. 1833.

We state, that Thomas Parker, a neighbor of ours, from the information given by him, had a cow that, after eating the vine, died. Our father's cattle also died after eating of it. Mr. Schoonmaker and a part of his family died of the Puking Complaint. Mr. S. gave a dog a crock of cream; he ate it and died. The crows, ravens and buzzards that ate the carcasses of the cattle of Mr. Schoonmaker died.—Our brother, T. Taylor, lives at the place—the water is pure and wholesome.

WM. TAYLOR,
S. TAYLOR

Aug. 19. 1833.

I do hereby certify that I lived in Clark county, Ohio, for sixteen years—that I had been uniformly of opinion that the water drunk by the cattle was the cause of the Milk Sickness or Puking Complaint. Having been told to the contrary, and that the eating of the poisonous vine produced it, I did not believe it. I then ate a handful; the next day I was attacked with puking, and was sick a month; Dr. Neadham of Springfield attended on me, and I recovered. I now live on Lewis' Reserve, Logan county.

JAMES M'MANNA.

August 11, 1833.

DESCRIPTION OF THE VINE.—1. It grows as a shrub, somewhat resembling a hickory or buckeye bush; when not attached to a tree, grows bunchy or bushy at the top. It is also found clinging to fallen timber, old rotten logs, in wet places, near the edge of ponds, creeks, and hollows of hills, frequently around stumps along the road, and sometimes in pastures or meadows. It has a singular leaf with one or two notches or saw teeth on each side.

2. As a vine when it attaches itself to a tree, it runs up as a creeper to a considerable height, and bears a berry, with a buff or brown coat, in bunches, and is minutely described as a vine affecting the vineyards of the Asiatics, and styled by the Arabs "The Wolf Grape;" and by Isaiah, the "Wild grape." I enclose one or two of the leaves for your inspection.

THOS. S. HINDE.

Mt. Carmel, Ill. Sept. 29, 1833.

3. The poison vine referred to uniformly has three leaves on a stem—the poison Ivy five, and notched all round. The wild Creeper or Trumpet flower, a long stem and many leaves.

A large majority of the Delegates from the State of Maryland, to the National Silk Convention, assembled at the Masonic Hall in the City of Baltimore, on the 13th of December, 1838.

Luther J. Cox, Esq., was appointed Chairman, and Thos. H. Dawson, Secretary.

The necessity and expediency of forming a State Convention, to meet at Annapolis during the session of the Legislature, was taken into consideration, and on motion it was Resolved, that a State Silk Convention be formed, to meet at the City of Annapolis, on the 3d Tuesday in January next.

Resolved, That the citizens of each county in this State, friendly to the culture of Silk, be requested to hold meetings and appoint, not exceeding 5 delegates, to meet said Convention to be held in the City of Annapolis, at the time mentioned in the foregoing resolutions.

The newspapers of the State are requested to give the above a few insertions.

LUTHER J. COX, Chairman.

THOS. H. DAWSON, Secretary.

AGRICULTURAL IMPLEMENTS AND SEED SEORE.

THE SUBSCRIBER informs the public that he keeps constantly on hand at his old establishment in Pratt-street, near Hanover, a large assortment of PLOUGHS and Agricultural IMPLEMENTS generally, which are too numerous to name in an advertisement, but invites such of the public who are in want of any articles in his line to call, assuring them that his work shall be as well made, of as good materials, and on as reasonable terms as any in the State. His patent Cylindrical Straw Cutters made on his late improved plan are kept at all times on hand, of various sizes and prices, with wood and iron frames—and he challenges its equal in any part of the world. Having an iron foundry attached to my establishment, all orders for Ploughs and Machine castings can be furnished at short notice and on reasonable terms.

In store—Herds and Orchard GRASS SEEDS, of prime quality; also, Landreth's superior GARDEN SEEDS. He is also agent for Mr. Samuel Reeves' Nursery, near Salem, New Jersey, whose fruit trees he can recommend to the public with confidence. Those wishing Trees from that Nursery this fall should hand in their orders immediately.

J. S. EASTMAN.

FOR SALE,

A valuable FARM of prime soil, on the Western Run in Baltimore county, about two miles north-west of the 14th mile stone of the Baltimore and York turnpike road, and at the same distance from the depot of the Baltimore and Susquehanna rail road, at Cockey's tavern, in a rich, highly cultivated and healthy tract of country.

This farm contains from 260 to 270 acres, having a full proportion in wood, much of which is building timber, peculiarly valuable in that neighborhood; is in the best state of cultivation; a considerable part in productive timothy meadow, and the residue of the arable land, not in grain, is well set in clover, the whole under good fencing, laid off into convenient fields, each of which is well watered. The farm has a large quarry of excellent building stone. There are on the premises an apple orchard of select fruit trees, which seldom fail to bear abundantly; a valuable mill seat on the Western Run, with a race already dug. There is no location in the country more favorable for a grist mill, having the advantage of a rich and thickly settled neighborhood, and a good public road leading thence to the turnpike road. Buildings substantial and convenient, being a STONE DWELLING, and kitchen of two stories; a large stone Switzer barn, with cedar roof and extensive stabling below; large hay house and stable for cattle; stone milk house near the dwelling, with a spring of fine never failing water, with other out-houses. On the country road near the mill-seat a good house and shop for a mechanic, under rent to a good tenant. It is well known the lands on the Western Run are in every respect equal, if not superior to any in the county. Adjoining or near are the lands of Col. N. Bosley, Daniel Bosley, Thos. Matthews and others. The water power, with about 20 acres of land, is so situated that they may be detached and sold separately, without injury to the rest of the farm for agricultural purposes. Terms of sale will be liberal. Apply to

NATHANIEL CHILDS,

on the premises, or to

WILLIAM J. WARD,

on 23 tf

Fayette, near Calvert st. Baltimore.

THE MARYLAND SILK COMPANY OF BALTIMORE

Offers for sale 25,000 genuine *Morus Multicaulis* trees, 20,000 *Alpin*, *Canton*, and other varieties.

d 25

L. J. COX, President.



Wm. Prince & Sons will make sales of Trees and Cuttings of the Genuine Chinese *Morus Multicaulis*, *Morus Expansa*, *Alpine*, *Broussa*, *Canton*, and other varieties, deliverable to the purchasers at such period in the Spring, as is convenient to them, and will enter into contracts accordingly. Prices and

terms for the trees and cuttings will be forwarded to all who may apply for them by mail, as well as prices of silk worm eggs, mulberry seeds, &c. The *Multicaulis* trees are remarkably vigorous, and as we first imported the genuine tree, purchasers are sure of obtaining the true kind. It is from this cause, and from the great attention paid by them, that the trees they have sold have given universal satisfaction.

Flushing, near New York—Jan. 1.

1m

SILK AGENCY OF BALTIMORE.

The undersigned has opened the Spacious Room, No. 194 Baltimore street, for the purpose of Receiving, Exhibiting, and Selling on Commission all useful and approved articles connected with the growth, production and manufacture of American Silk. This establishment is designed also to concentrate information and improvement on the subject and advancing this great national enterprise. The following are among the articles which will be constantly for sale, viz:

Morus Multicaulis, *Canton*, *Alpine*, *Asiatic*, *Brussa* and other approved MULBERRY TREES, to produce food for Silk Worms.

Cocoons of every variety.

Eggs for producing Silk Worms.

MACHINERY for Reeling and Manufacturing.

Periodicals and Standard Works for giving information.

jan 1 3t*

E. CENTER.

CHINESE MULBERRY TREES.

American Silk Agency, No. 95, Walnut st. Philadelphia.

The subscriber having opened a permanent Agency for the purchase and sale of all articles connected with the culture and manufacture of Silk in the United States, offers for sale all the different varieties of MULBERRY TREES, suitable for raising the SILK WORM; viz: *Morus Multicaulis* *Alpine*, *Brussa* *Multicaulis* Seedlings *Morus Expansa*, *Multicaulis* Cuttings, Improved Italian Trees, &c. Also, Cuttings from Norton's Virginia Seedlings, and Cunningham's Prince Edward GRAPE VINES. These vines produce an abundant crop of fruit, warranted not to rot or mildew and are fine for the table, and capable of yielding the finest wines.

S. C. CLEVELAND, Agent.

N. B. The particular attention of those engaged in the culture and manufacture of American Silk, whether of trees, Eggs, Cocoons, reeled or manufactured, is called to this agency. The Agent will give every attention to Sales, and prompt remittance of proceeds of any article sent to him. Those who may wish to purchase and enter in this valuable branch of home industry, can obtain from the agent every information, and also such articles as they may want without fear of deception. oc 9 tf

SPLENDID BLOODED STOCK FOR SALE.

The proprietor of Covington farm will dispose of the following fine bulls on reasonable terms, viz:

One bull two and a half years old.

One do. six months old.

of the improved Durham short horn breed; the dam of the first was got by the celebrated bull Bolivar; for size, form and beauty they are not surpassed by any animal in the state.

Three Devon Bulls, one of which is seven years old next spring, and the largest Devon in the State. The Devons are from the stock of the late Wm. Patterson, and of undoubted purity.

Two half Devon bulls.

Two bulls half improved Durham short horn, and half Devon.

One splendid bull, a cross of the Bakewell, Alderney and Devon.

One bull, half Alderney and half Holstein.

These fine animals may be seen at Covington farm, near Petersville, Frederick county, Md. on application to James L. Hawkins, Baltimore, or to

on 11 f

FREDERICK FBERT, Manager.

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every Monday

	PER	FROM	TO
BEANS, white field,.....	bushel.	1 25	
CATTLE, on the hoof,.....	100lbs	7 00	9 50
CORN, yellow.....	bushel		
White.....			
COTTON, Virginia,.....	pound	9	11
North Carolina,.....	"	9 1/2	11
Upland,.....	"	9 1/2	11
Louisiana—Alabama.....	"	11 1/2	12
FEATHERS,.....	pound.	45	50
FLAXSEED,.....	bushel.	1 12	
FLOUR&MEAL—Bestwh. wh't fam.	barrel.	10 00	10 50
Do. do. baker's.....	"		
SuperHow. st. from stores	"	8 00	8 12
" wagon price,.....	"	7 75	7 75
City Mills, super.....	"	8 12	8 25
" extra.....	"	8 50	
Susquehanna,.....	"		
Rye,.....	"	5 50	
Kila-dried Meal, in hhd. hhd.		19 00	
do. in bbls. bbl.		4 00	
GRASS SEEDS, wholes. red Clover, bushel.		15 00	
Kentucky blue.....			
Timothy(herds of the north).....	"	3 00	
Orchard,.....	"	2 00	2 50
Tall meadow Oat,.....	"		3 00
Herds, or red top,.....	"	90	1 00
HAY, in bulk,.....	ton.	12 00	16 00
HEMP, country, dew rotted,.....	pound.	6	7
" water rotted,.....	"	7	
HOGS, on the hoof,.....	100lb.	8 50	9 00
Slaughtered,.....	"	8 00	8 50
HOTS—first sort,.....	pound.	9	
second,.....	"	7	
refuse,.....	"	5	
LIME,.....	bushel.	32	53
MUSTARD SEED, Domestic, —; blk. " 3 50		4 00	
OATS,.....	"	44	45
PEAS, red eye,.....	bushel.		1 12
Black eye,.....	"	1 00	1 12
Lady,.....	"		
PLASTER PARIS, in the stone, cargo, ton.		4 50	
Ground,.....	barrel.	1 50	
PALMA CHRISTA BEAN,.....	bushel.		
RAGE,.....	pound.	5	4
RYE,.....	bushel.	88	95
Susquehanna,.....	"		none
TOBACCO, crop, common,.....	100lbs	4 50	5 00
" brown and red,.....	"	5 00	6 00
" fine red,.....	"	9 00	10 00
" wrappery, suitable.....	"		
for segars,.....	"	10 00	20 00
" yellow and red,.....	"	10 00	12 00
" good yellow,.....	"	10 00	14 00
" fine yellow,.....	"	12 00	15 00
Seconds, in quality,.....	"	6 00	
" ground leaf,.....	"	7 00	9 00
Virginia,.....	"	6 00	9 00
Rappahannock,.....	"		
Kentucky,.....	"	6 00	8 00
WHEAT, white,.....	bushel.	1 75	1 78
Red, best.....	"	1 70	1 75
Maryland.....	"	1 50	1 70
WHISKEY, 1st pf. in bbls.....	gallon.	45	
" in hhd.	"	41	
" wagon price,.....	"		40
WAGON FREIGHTS, to Pittsburgh, 100lbs		2 00	
To Wheeling,.....	"	2 25	
WOOL, Prime & Saxon Fleeces,.....	pound.	50 to 55	
Full Merino,.....	"	45 50	
Three fourths Merino,.....	"	40 45	
One half do.....	"	35 40	
Common & one fourth Meri.	"	35 40	
Pulled,.....	"	30 33	
POTATOES, 60 to 70 cts. a bushel.			

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,.....	barrel.		
BACON, hams, new, Balt. cured....	pound.	15	
Shoulders,.... do.....	"	14 1/2	
Middlings,.... do.....	"	14 1/2	
Assorted, country,.....	"	13 1/2	
BUTTER, printed, in lbs. & half lbs.	"	31	37 1/2
Roll,.....	"	25	31 1/2
CIDER,.....	barrel.	1 75	2 00
CALVES, three to six weeks old....	each.	5 00	6 00
Cows, new milch,.....	"	25 00	40 00
Dry,.....	"	12 00	15 00
CORN MEAL, for family use,.....	100lbs.	1 75	
CHOP RYE,.....	"		1 60
EGGS,.....	dozen.	12 1/2	
FISH, Shad, No. 1, Susquehanna, barrel.		9 75	10 00
No. 2,.....	"	9 50	
Herrings, salted, No. 1,.....	"	5 75	
Mackerel, No. 1, ————No. 2.....	"	12 50	
No. 3,.....	"		7 25
Cod, salted,.....	cwt.	3 25	3 37
LARD,.....	pound.	14	15

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

U. S. Bank,.....par	VIRGINIA.
Branch at Baltimore,....do	Farmers Bank of Virgi. par
Other Branches,.....do	Bank of Virginia,....do
MARYLAND.	Branch at Fredericksburg,do
Banks in Baltimore,....par	Petersburg,.....do
Hagerstown,....o	Norfolk,.....do
Frederick,.....do	Winchester,.....do
Westminster,.....do	Lynchburg,.....do
Farmers' Bank of Mary'd, do	Danville,.....do
Do. payable at Easton,....do	Bank of Valley, Winch. par
Salisbury,.... 1 per ct. dis.	Branch at Romney,....par
Cumberland,..... par	Do. Charlestown, par
Millington,.....do	Do. Leesburg,....par
DISTRICT.	Wheeling Banks,.... 2 1/2
Washington, } Banks, 1/2 p.c.	Ohio Banks, generally 3
Georgetown, } Banks, 1/2 p.c.	New Jersey Banks gen. 3
Alexandria, }	New York City,....do 1/2
PENNSYLVANIA.	New York State,....do 1/2
Philadelphia,.....par	Massachusetts,.... 1 1/2 a 2
Chambersburg,..... 1/2	Connecticut,.... 1 1/2 a 2
Gettysburg,.....do	New Hampshire,.... 1 1/2 a 2
Pittsburg,..... 2 1/2	Maine,..... 1 1/2 a 2
York,..... 1/2	Rhode Island,.... 1 1/2 a 2
Other Pennsylvania Bks. 2	North Carolina,.... 3 a 3 1/2
Delaware [under \$5].... 4	South Carolina,.... 4 a 5
Do. [over 5]..... 1 1/2	Georgia,..... 5 a 5 1/2
Michigan Banks,..... 10	New Orleans,..... 7 a 8
Canadian do..... 10	

BARHAMVILLE INSTITUTE,

With 10,000 Morus Multicaulis Trees, for sale.

The establishment now offered for sale, is called Barhamville. It is beautifully and eligibly situated about 2 miles from Columbia, (the capital of S. C.) in a region of country termed the Sand-Hills. The grounds comprehend between 500 and 600 acres; they are well timbered, (chiefly pine and small oak); about one half consist of what is termed bottoms, rendered perfectly dry and tillable, by at least 6000 yards of ditching, most of which measures 5 feet in width by 3 1/2 in depth. There are upwards of 70 acres completely ditched, now ready for being broken up, which I value at \$50 per acre.

The Institute buildings are situated upon a high range of Sand-Hills, proverbial for health, inasmuch that the neighborhood affords a retreat for many of the families of Columbia during the summer months. It was on that account that the site was selected for the business (a female Boarding School) to which the buildings have been dedicated. The water is excellent, supplied by two pumps—besides which there are two excellent springs.

The centre building is of wood, well plastered, and neatly finished throughout, and measures 54 feet square, three stories high; the upper room or attic story being 15 feet in height. Beneath this building is an excellent cellar, above ground. The wings attached to the centre building are 100 feet each in length, the one 24 and the other 34 feet in width. The southern wing is of brick,

well plastered, two stories high, well finished throughout, having an excellent cellar above ground. The northern wing, recently built, is of wood, ceiled throughout. It is three stories high, with an attic story equal in its area and superior in its height to the three lower stories. The basement story of this wing is of brick.

A mahogany spiral stair-case of superior workmanship, which with other improvements attached, cost upwards of \$2500, ascends throughout the centre building.

From the extremity of the brick wing, and at a right angle with it, proceeds a building, (the academic edifice) 134 feet in length by 34 feet in width, two stories high, well ceiled throughout, and having an excellent cellar above ground.

Besides fire-places, the whole establishment, with the exception of the brick building, is warmed by air-furnaces, on the most improved plan, similar to that by which Grace Church and many public and private edifices in Philadelphia are warmed.

The expense of erecting the apparatus, &c. amounted to upwards of \$2500.

The area of all the floors in these buildings, is, by measurement, upwards of 100,000 square feet. On the Institute buildings is an insurance for \$15,000.

There are also, at a small remove from the main buildings, two residences, cottage-built, neatly finished; the one containing 4, and the other, 2 rooms.

Within 300 yards of the Institute, on an eminence, is the mansion built by me for the late John La Taste, repurchased by me from his family. This is a highly improved residence. The house stands upon brick pillars about 5 1-2 feet from the ground; the four lower and two upper rooms being well finished; out-houses, &c. in good order.

It is unnecessary to say, that the out-buildings of the institute are, in every respect, correspondent to the main building. The garden has been improved at a considerable expense.

With the above establishment, every way fitted for an extensive Silk Factory, may be had 10,000 Morus Multicaulis trees, 500 of which are 6 years old, all of vigorous growth, which, at the present time, will yield upwards of 200,000 cuttings; they are now regularly planted, 12 feet by 12. 100,000 cuttings, of two and three eyes each, are now being set out, well secured from frost by a ground dressing of long manure.

When the intrinsic value and resources of the above establishment are taken into consideration, and when it is recollected that in one year, from the present time, Columbia will be connected with Charleston by a rail-road, now in a vigorous state of progression; when it is, furthermore, recollected, that this rail road is to connect the sea-board with the great north-west, it may be said that the property now offered for sale, presents inducements to individuals or companies, desirous of embarking extensively in the Silk business, unsurpassed by any thing offered in this country.

The buildings, collectively, cost upwards of \$60,000, and the lands, with the improvements bestowed upon them, will command at auction \$25 per acre, and, as it respects the value of the trees, an estimate can be easily made by reference to the prices they are now commanding in the Northern and Middle states.

I will sell the above at two-thirds of the original cost, on the following terms: one-third cash, and the remaining two-thirds payable in one and two years, with interest from time of sale, mortgage and approved security and policy of insurance assigned.

ELIAS MARKS, M. D.

Barhamville, near Columbia, S. C.

I will dispose of 100,000 cuttings (or 200,000 eyes) each cutting to consist of 2 or 3 eyes, hermetically sealed at each end with a composition of beeswax and rosin. Price 2 1/2 cts. per eye, delivered in Columbia. E. M. de 18 6t

SILK AGENCY,

Corner of E. and 7th streets, Washington City, D. C.

The subscriber having commenced an Agency for the purchase and sale of SILK MULBERRY TREES, and all articles connected with the growing of Silk, offers for sale the following varieties of Mulberry Trees at Baltimore prices, viz. Multicaulis, Alpine, Broussa, White Italian and Canton; also Mammoth White Silk Worm's Eggs, warranted to be of superior quality. All the recent publications on silk growing for sale, and subscriptions received for the various periodicals devoted to that subject. no 20 J. F. CALLAN.

A HALF DURHAM COW FOR SALE.

The subscriber has for sale a beautiful fashionable roan half Durham Cow. She is fresh in milk and only 4 years old. Her price is \$75. Applications, post-paid, to be made to ED. P. ROBERTS. Who has also for sale several full bred Devons, males and females. ee 2 4t

THE FARMER & GARDENER

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, E. P. ROBERTS AND SAMUEL SANDS—EDITED BY E. P. ROBERTS.

No. 37.

BALTIMORE, MD. JAN. 8, 1839.

Vol. V.

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BALTIMORE: TUESDAY, JAN. 8, 1839.

THE NATIONAL SILK CONVENTION.

In looking over the proceedings of this body, it appeared to us proper that we should make a few general remarks upon their character and tendency, so as to arouse the attention of the people to a just estimate of their profound importance. It will be recollected that but a few weeks notice had been given for its meeting, and we are sure the reader will be surprised to learn that, on the first day of its assemblage, *one hundred and seventy-five members* were in attendance; that before its adjournment, *three hundred members* were present, and that *eleven states* besides the *District of Columbia* were represented, thus manifesting the deep and absorbing interest that has been awakened to the success of this new and lucrative branch of agricultural industry. To us—who have labored for years with an honesty of purpose, and a zeal that nothing could repress; who have looked on unmoved amidst the sneers of the ignorant, and the taunts of others, who were either too idle to investigate the question, or too indifferent to the issue to encounter the labor—we confess that the array of talent, virtue, and respectability, which were to be found in the *Convention*, was indeed a most gratifying and heart-cheering spectacle. In it we beheld the sure and unerring evidence, *that the silk culture had taken a deep and abiding root in the affections of the people*; and we seize this occasion to congratulate our countrymen on it, as being one of the most auspicious events that have happened in the history of our country, not even excepting the one which occurred on that proud day, when the fathers of our land, at the “peril of life, liberty and property,” declared that “we were, and of right ought to be, a free and independent people.” We say this with a full knowledge and just appreciation of the value in a moral and political point of view, of all the leading points connected with it. The declaration of independence set

forth, in the stern language of indignant patriotism, the wrongs which had been inflicted upon the then colonies—the recital of those wrongs, couched as it was in the language of truth, carried with it a moral force that rallied around our standard every heart that was prepared to make a generous sacrifice on the altar of patriotism—to go his death for his country. It went farther—it awakened the latent feelings of love of country in many breasts, where a spirit of neutrality had previously dwelt; for they saw that, as the sword had been drawn, and the scabbard thrown away, the only alternatives left were, either to come to the rescue of the Republic, or to incur the blasting odium of being traitors to the land of their adoption or birth, and choosing the former, they too, rallied under those stripes and stars that carried Washington and his compeers triumphantly through the unequal contest, and won for us our national existence. By the *declaration of independence* then, and the glorious deeds achieved under its auspices, *our being as a political people* were attained; and if we could, or if it had been desirable for us to have remained exclusively an agricultural and manufacturing community, our independence would have been complete. But as the germs of *commerce* had been already planted, a higher and more noble destiny awaited us, and it was reserved for us to become the second commercial country in the world. Our independence acknowledged, and the treaty of peace between us and our theretofore mother country established, the confidence and friendship of other nations were thus secured, and alliances of peace formed. This laid the groundwork of extensive commercial relations with the nations of every sea known to civilized man; new sources of wealth opened to our acceptance; the spirit of commercial enterprise already awakened, became reinvigorated, and our adventurous tars were seen filling their sails in every ocean. Year after year has rolled around but to increase our distant trade, and had the productions of our soil—had our *exports* kept pace with our *imports*, all would have been well—the body politic would this day be sound to the core. But as with individuals, so it is with nations; when either buys more than it has the means of paying for, embarrassments must ensue; and neither can be said to be inde-

pendent, with a large pecuniary debt hanging over their heads. A nation, by its political charter, may declare its citizens, or subjects, politically free and independent; but the immunities and privileges thus conferred, however sacred in the eye of patriotism—however fondly they may be cherished by those who dwell under their protecting influences, do not vouchsafe the full fruition of man’s independence in the broad sense of the term, unless his fiscal affairs be also free from difficulties. As a *people* then, no nation can be said to be independent, whatever may be the condition of their political rights—no matter how free the institutions under which they live may be, where a large balance of trade is against them. If they *buy more than they sell*, dependence for a time is the necessary consequence—this dependence, it may be said, is but *temporary*; still view it as you may, blink the question as, and how you may, the grating fact stares us in the face. The late monetary difficulties of our country go strongly to corroborate our position, and notwithstanding much of the mischief was done by home speculations and ill concerted fiscal arrangements here, still the evils arising from this cause, were but as drops in the bucket, compared with the volume of water in the ocean, when relatively considered with those which arose from the excess of our foreign debt over our then present means to meet it. In the midst of all the troubles through which we have just passed, what would have been our condition but for the surplus products of agricultural labor—our cotton, sugar and tobacco—which were so judiciously made to appease our foreign creditors. We say then, that to be truly independent, we must so far *raise* the value of our *exports* as to meet that of our *imports*, or reduce the latter to the standard value of the former. Our course ought to be to pursue the first mentioned plan, and we maintain that we may accomplish it in a few years, if the American farmers and planters will, as they ought to do, generally introduce the Silk culture as a small branch of their respective systems of culture. Two acres in every hundred occupied in the growth of grain, will, in ten years, if devoted to the *raising of silk*, give us an aggregate amount of additional values, which will place us in the more wholesome relation of *creditor*, instead of being as we now are *debtor* to

the nations of Europe; and while this salutary national condition will be brought about, without any extraordinary diversion of the present agricultural force of the country from its usual pursuits, the degree of individual happiness and comfort, which will be dispensed throughout the land, will be still more beneficent. And hence it is, that we have seized upon the occasion to congratulate our countrymen on the evidence furnished by the proceedings of the Convention, of the existence of a feeling and an interest among the people, in behalf of the silk culture, which will carry it onward until it works out the regeneration of our country from pecuniary thralldom; gives employment to the industrious poor, increases the competency of those in better circumstances, and opens to the destitute widow and her helpless little ones, the possession of that which will "bind up their wounded hearts and pillow their aching heads."

THE STATE SILK CONVENTION.

We publish in our journal to-day the proceedings of the meeting of the friends of the Silk culture held in this city on the 2d inst. to appoint delegates to the State Convention to be held at the city of Annapolis on the 15th inst. and commend them to every friend of the cause in Maryland. Approving of the objects contemplated to be attained by the convention, and deeming them of the very first importance to the future well-being of the state, we trust that every county in it will take prompt and efficient measures to be represented. Possessing, as Maryland does, a climate and soil peculiarly adapted to the Silk culture, we indulge the hope that her citizens will manifest a proper and becoming zeal in her welfare on this occasion. Should they do so, the day is not distant when her exports of raw silk will exceed, in value, those which she now derives from wheat and tobacco. Believing as we religiously do, that this auspicious state of things may be brought about in ten years, if our advantages are properly improved, we are sure we will be excused for urging upon our people the earliest attention to the subject, and for hoping that the culture may find favor with the legislature, whose province it will be to carry out the views of the approaching convention.

SILK CULTURE.

We extract the following from Gov. Shannon's message to the legislature of Ohio, and are pleased to find in his first official communication to that body, he has shown himself attentive to a branch of agricultural industry most worthy of

the fostering care of the government of that, as of every other state in the union. Nor are we less pleased to find by the Governor's notice, that a very lively interest has been awakened to it in that quarter, as from the intelligence, industry and enterprise of the people of Ohio, we are sure, that its march will be onward. The example so praiseworthy set by Governor Shannon, we trust will be followed by the Executives of the other members of the confederacy, and that the several legislatures, where encouragement does not already exist, will have the moral courage to carry out the views which may be recommended to their adoption.

Governor Shannon observes:—

The agricultural and mechanical branches of business, being the sources of all real and substantial wealth, are entitled to the special favor of the legislature. The culture of silk, in various parts of the State, is exciting much interest among many of our agriculturists and manufacturers, and, it is confidently believed by those whose experience and knowledge entitle their judgment to considerable weight, that our soil is as well adapted to this kind of business as France or Italy, where it has added so much to the national wealth of those respective countries.

From the experiments which have been made, it may be said with certainty, that the successful culture of silk in Ohio, is no longer a matter of doubt; all that is wanting to render the business entirely successful and prosperous, is the direction of public attention to the subject; and to extend to it in its infancy, and for a limited time, some legislative aid by allowing a bounty to the producer of the raw material. A laudable anxiety has been manifested in several of the states to encourage this branch of industry by extending to the producer, a liberal bounty, for a limited time, and it has been the cause of directing public attention to the subject, and bringing into active operation the manufacture of this valuable article. I would recommend the adoption of a similar policy in our own State."

MANAGEMENT OF POULTRY.

"*An Inquirer*" asks us how he is to manage to make his hen's lay eggs? and in reply to his inquiry we would remark, that he should provide them at some place convenient to the hen-house, with *lime* and *gravel*, and give them *fresh water* daily; that they should be alternately fed with parched corn, wheat, and buckwheat, and occasionally to be given a few cabbage leaves when the ground is covered with snow.

Cows.—In every barn-yard there should be a trough provided, in one corner of which there should be placed a large lump of chalk, so that the cows might go and lick it when they pleased, and by also placing in their troughs a mixture of an equal quantity of *salt* and *tar*, the cows would be the better of it.

MEETING OF SILK CULTURISTS.

At a meeting of the citizens of Baltimore, friendly to the culture of Silk, on Wednesday evening, 2nd January, L. J. Cox, Esq. was called to the chair, and Gideon B. Smith appointed Secretary; when the following resolutions were unanimously adopted, viz:

1. *Resolved*, That this meeting fully concur in the resolution unanimously adopted by the National Convention recently held in the city of Baltimore, "that silk may be grown in all the United States, not only for domestic purposes, but as a valuable article of commercial export."

2. *Resolved*, That the State of Maryland possesses peculiar advantages in soil and climate for this great object of industry, and that we approve of holding a State Convention at Annapolis on the 15th day of January inst. for the purpose of adopting measures to advance the cause.

3. *Resolved*, That Luther J. Cox, Dr. C. C. Cox, Gideon B. Smith, Wm. P. Mills, and James O. Law, be appointed delegates to the State Convention, to be held at Annapolis on the 3d Tuesday, 15th of January inst. with power to fill any vacancy that may occur in said delegation.

4. *Resolved*, That our delegates in the State Convention be requested to urge the adoption of measures in said Convention, to lay before the State Legislature, by memorial or otherwise, the necessity of some legal enactments for the protection of Mulberry plantations from depredations by trespassers, and of making the stealing or carrying away of mulberry trees by trespassers, an act of felony.

5. *Resolved*, That this meeting approve of the recommendation of the National Convention that state and county societies be formed for the furtherance of the cause of the Silk culture, and that our delegates to the State convention be requested to advocate the same in the Convention.

6. *Resolved*, That our delegates in the Convention urge upon that body the propriety of memorializing the legislature on the subject of encouraging the culture of silk, by offering liberal bounties for the production of cocoons, sewing or other twist silk, and merchantable raw silk.

Whereas, great advantages will accrue to the Silk growers of the United States, from a uniformity of reeling and preparation of raw silk according to some fixed and well known standard; and whereas, the reel known in Europe, as the *PIEDMONTESE REEL*, combines all the essential principles of the best apparatus for the purpose of producing the most perfect raw silk; and, whereas, the National Convention recently held in the city of Baltimore, unanimously recommended said reel, or some other combining its essential principles and proportions, to the silk growers of the United States; therefore,

7. *Resolved*, That this meeting, fully concurring in the opinion of the National Convention, request the delegates from this city in the State Convention, to urge the adoption of resolutions recommending the Piedmontese reel or any other combining its essential principles and proportions, to the silk growers of this state.

8. *Resolved*, That the proceedings be signed by the officers of this meeting, and that the several newspapers in this city be requested to publish them.

LUTHER J. COX, Chairman.

GIDEON B. SMITH, Sec'y.

Hogs.—Once a week during winter, throw into your hog pen a shovel full of charcoal.

Sheep.—Keep in a trough during the winter in your sheep-fold, a mixture of tar and salt, to which your sheep can have free access.

Bone Manure.—We were gratified to learn while at the bone-mill a few days ago, that this excellent manure is getting into great repute; that the orders for it of late have been so numerous as to exceed the supply. This argues well for the enterprise and intelligence of the agricultural community.

Cooking Potatoes.—Potatoes intended for the table should *never be boiled*, but *steamed or baked*. If steamed, water barely sufficient for that purpose should be put into the vessel in which they may be prepared. After the potatoes are cooked sufficiently, any water which may remain should be poured off, and the lid removed to let the steam fly off; when the potatoes become thus dried, they are to be taken up and dressed.

[From the Franklin Farmer.]

BREEDING YOUNG HEIFERS.

We insert to day a communication upon this subject from one of the most enlightened breeders in the country, a gentleman, who, to a passionate devotion, combines in his person, a degree of knowledge rarely to be met with.

The author of the treatise upon British Cattle, published under the superintendence of the Society for the diffusion of useful knowledge, has strongly reprobated the practice of breeding heifers at an early age. Some of his arguments are plausible and his assertions are strong; and Lawrence, in the Farmer's and Grazier's Guide, says the practice of breeding early, "destroys the stamina of the animal's constitution, entails a feeble and unhealthy issue, exhausts the powers of the devoted animal, and not only shortens her life but occasions many and serious disorders."

Now if the size and appearance of a two year old heifer are to determine her value, I would readily admit that at two or three years old, the one that has had no calves will appear finer than one that has bred. But this is not the case at five years old; and all my best milkers are cows that had calves at two years old.—So that we lose nothing in size ultimately and gain greatly in milk. I might say that whenever we wish to give strength to any system of vessels or muscles in the animal economy, they should be brought into action in early life.

The breeders of the improved Short horns have found the great disposition to fatten, to interfere with their breeding; and breeding early is the best preventive for two reasons, namely, a part of the nourishment necessary to make flesh, that would be accumulating during the second year, goes to the nourishment of the calf (foetus) before it is produced, and afterwards, in preparing milk for it. The largest cows on my farm had calves at two years old, and I see no appearance of their having been injured by their early breeding. I could give many cases in the stock of other persons, but will content to give one to prove that it does not shorten their lives or injure their constitutions.

Mr. Charles Carr's cow, Mary Ann, had her first calf when thirteen months old, and continued breeding until she was twenty years old; and at twenty one years of age she was fattened and slaughtered and made very superior beef. I have had no heifer to have any difficulty in calving except in one case when the presentation was wrong; but my heifers have all been bred to thorough bred bulls, and their produce is not as large at birth as from the bulls we formerly had among us. I would however bespeak for the heifers that are

bred early, good and generous keep.* Let them be fat enough when they have their calves to afford to lose the flesh which will be necessary to make the milk to sustain the calf without being reduced to a skeleton. And those that wish to have milkers, should pay particular attention to having the heifers well milked; for if they are neglected with their first calves, no care will ever make good milkers of them afterwards. A cow that is dried of her milk early with her first calf; will be disposed to go dry at the same period with her next. From the above and many other reasons that might be given, I am of the opinion that heifers should be bred at such a time as to have their first calves when about two years old.

SAM'L. D. MARTIN.

* A letter from Dr. Martin, received since the following communication was forwarded us, says:—"I am afraid my article on early breeding will do harm, if its recommendations are practiced without good keep to the young heifers." Although our own opinions and practice coincide with those expressed in the above communication, we would be glad if those who differ in theory or practice would discuss the subject in our columns. The philosophy of the subject may be ably argued on both sides; but an accumulation of facts, in favor of and against the practice of early breeding, would render a useful service to the cause of improved breeding. To make a breed of milkers, we should, in our own practice, breed at an early age; to make a breed of fat bees, arriving at early maturity, we should defer breeding till the heifer was three years old, so as to calve at four. But we do not offer our opinions or practice as an example to others. Perhaps we may be wrong in both; and we feel desirous to see the whole subject fully discussed. But we do think that some of our large breeders are pursuing some grievous practices, which will have no favorable effect upon the future character of the cattle of the country. We have long ago thought of the propriety of attacking some of these practices; but there is such a fever among the breeders, that, however impartially or philosophically we might view the subject, some of those whose practices we might condemn, would consider us hostile to their individual interests. We have already suffered such unjust imputations; but time—and we trust a short time—will, we doubt not, demonstrate to all the breeders, the propriety of seeking after and endeavoring to improve all the valuable and desirable qualities of cattle. At present, too many are breeding for large fat cattle, without reference to the milking property. As soon as the price of Durham cattle begins to decline seriously, we shall see that hundreds of breeders will wish they had cultivated the milking property in breeding; and if the milk stock then does not command a better price than the mere beef stock, we will acknowledge that we are neither a prophet nor the son of a prophet. But we wish our readers who entertain opposite sentiments, to defend their own opinions; and we tender them our columns for the full discussion of the subject.—Ed. Fr. Farmer.

Agricultural Convention.—We learn by the Journal, that the State Agricultural Convention assembled in the Representatives Hall on Wednes-

day last, and organized by the election of Anthony Walke, Esq. of Ross county, Chairman. A State Agricultural Society was formed, of which Samuel Spangler, Esq. of Fairfield county, was chosen President.—*Cleveland, (O.) Herald.*

PIGS AND PIGGERIES.

The improvements which are annually taking place in Agriculture, are seen and felt as much in the attention that is now paid to the rearing and fattening of good farm stock, as any thing.

We are pleased to see that the Hog comes in for a share of the attention, and that there seems to be at this moment a peculiar enquiry throughout the whole Union, what breed is the best, and how can they be best and most profitably managed?

The increased culture of roots, enables those who raise large quantities of them to multiply the tenants of the sty, inasmuch as they are enabled to feed them and keep them in a healthy growing state at a cheaper rate in many regions, by feeding them with these, than they can by grain. The hog seems to be a sort of omnivorous animal, that is, like his friend, protector, murderer and devourer, man, he can eat almost anything; but the food which appears to be most congenial to him, is roots, nuts and seeds or grains.

That roots were designed to enter largely into his diet, is plainly indicated by the formation of his snout and his habits of using it. Give him a chance and he will soon demonstrate to you that he not only knows where to find them, but how to dispose of them.

They are not so well calculated to fatten him as they are to give him health and strength—to keep him alive and active; but they are a very useful ingredient in the fattening process, and when combined with grain, may enter largely into his diet while preparing him for slaughter.

Fruits also, are very grateful to his palate, and apples are now coming very generally into use, as an article of food for the swine of the farm. Cooking his food, whatever it may be, has been found by experience to be a great improvement. Hence any one who may be desirous of rearing and fattening pork to the best advantage, should prepare a piggery or building, devoted exclusively for this business. The style and fashion of this building need not be very splendid, though every one may consult his own taste and means, in regard to it. Three requisites, however, should be attended to, viz:—It should be convenient—it should be warm—it should be tight and dry. The size should be according to the number that you wish to keep. As a general rule in building or enclosing, a circle will take the least stuff, and a square the next less quantity, and a parallelogram more than either. For instance, a circle twenty feet in diameter, will require nearly sixty three feet of fence or boards to enclose it. A square twenty feet each way, will require eighty feet, this will contain a little more area than the circle; but a parallelogram which shall contain as much area as the square (400 feet) say forty feet long and ten feet wide, will require one hundred feet to enclose it.

A circle is somewhat difficult to construct, but a square is very easy. Suppose you erect a building twenty feet square and have your pens on the outside—three of the sides will give you space enough to accommodate and feed 30 swine. You can have your wood, steamers, boilers and vats, in the

twenty feet room and feed them all without going out of the room by having a lid or trap door to lift up and give you a chance to the troughs. If you can have it placed on the side of a hill where water can be obtained easily, and have a cellar dug into the hill, the floor of which shall be on a level with the floor of your boiling room, it will be very convenient, but if not, a cellar below may be made in the usual manner and a granary in the chamber above.

Some years ago there was a communication published in the American Farmer, from Mr. Ingersoll of Roxbury, and subsequently in the Farmer and Gardener, respecting the management of a piggery, which gives the most systematic and methodical manner of managing swine that we have anywhere seen, and we shall publish it soon for the benefit of some of our readers, who we know are seeking information on this subject.—*Maine Farmer.*

(From the Maine Farmer.)

EVERY FAMILY SHOULD KEEP A PIG.

MR. EDITOR,—I am not much of a farmer, but have done something at it, and will, with your leave, through the columns of your valuable paper, give your readers a statement of my success in raising pigs.

I believe the business of pork raising, is not sufficiently attended to by most of our farmers, and the principal cause is, they do not reckon the profits or calculate the difference, between raising pork and beef. Pork is not only raised in less than half the time that is required to raise beef, but it yields a much larger profit.

In July of 1836, I purchased a sow pig, for which I paid \$2, which I still keep. She has been principally fed on wheat slops and swill that has been made about the house, and has had nothing else, except while she had a litter of pigs upon her. She run in the pasture three or four months in the summer. The whole expense of keeping her including taxes, interest, &c., has not exceeded 25 dollars to the present time, and the first litter of pigs she brought, all died. The second litter of nine, were sold in August, at \$2 00 each,

The 3d litter of nine—(2 died) 7 sold in February, 1838, at \$3	21 00
The 4th litter of eleven sold in August, 1838, at \$2,	22 00
The sow is now worth	30 00
The interest on the money received for pigs, would be about	3 00
	\$94 00

Deduct for cost and keeping of sow, &c.	25 00

Profit, \$69 00

It should also be observed, that the last litter of pigs might have been sold for \$3 each, but as that is a very high price and I was fortunate in losing none of them, I let my neighbors have them at two.

This, Mr. Editor, I think is a fair statement of the facts, and the expense of keeping is as highly rated as it should be, for I do not think that five dollars worth of food has been given her, except swill from the house, that would not have been otherwise thrown away.

Now Mr. Editor, should not every family keep one pig at least, to eat up the offal that is so frequently thrown out of doors, especially by persons who reside in villages and large towns?

The only way to relieve hard times, is by production or by economising what is already produced.

M. M.

Bangor, Dec. 1838.

PROFIT OF FRUIT TREES.

The profit which might be derived from the cultivation of fruit, it is believed is more neglected than almost any other crop of equal importance. The supply of markets might be safely relied on as a source of income, by those who live in the vicinity of our towns and larger villages. Predictions of ill success will of course be repeated by those who see failure in every thing, but the scantiness of good fruit in market, and especially of the early varieties, is well known; and our first rate kinds can scarcely be obtained in any quantity. These, when once procured, may be as easily cultivated as the worst, and the demand for them would be certain. In our cities, where alone such can be had in market, the prices of the finest kinds, instead of diminishing, have rather advanced. In proof of the demand for such, a case may be mentioned on the authority of William Kenrick, who states that a single tree of Prince's Imperial Gage Plum, owned by Samuel R. Johnston, of Charlestown, Mass., has for several successive years, yielded crops which were sold at from forty to fifty dollars per annum. This, it is true, is a fine and uncommonly productive variety, but it will grow in New York as well as in Massachusetts. If finer fruit is demanded than formerly and the public taste is growing fastidious, cultivators may very easily outstrip this growth by directing their attention to the best kinds.

To those who do not live in the vicinity of towns, and who are consequently deprived of a ready market for early fruit, there is another channel for profit opened, not less important. This is the cultivation of fruit, chiefly apples, for feeding farm stock. It has already received considerable attention, and the value of this kind of food and its superiority to potatoes, fully determined. But its cheapness is not perhaps generally appreciated. A great advantage in raising this crop, is the little labor in cultivation which is required, after the orchard has attained bearing size. The crop may be said to come without labor, nothing more being needed than to gather it, and this is in fact less laborious than the gathering of almost any other. The actual cost per bushel may be ascertained with tolerable accuracy by an estimate. We will first determine the expense of an acre of orchard. Land well adapted to this purpose may be had for forty dollars an acre; and the number of trees to the variety is the Bough or Tallman Sweeting, which are of smaller growth than usual. The price of a hundred trees, if purchased by the quantity, would not be more than fifteen dollars. A laborer would dig the holes and plant ten in a day,* so that the planting, at a dollar a day, would cost ten dollars. No further care would be needed until the trees should arrive at a full bearing state, but cultivation, which of course would produce sufficient crop to pay the rent of the land during that time. An orchard

then in a good bearing condition would cost as follows:

Cost of Land	\$40
do. Trees,	15
do. Planting,	10
	\$65

The orchard would subsequently produce more if kept generally cultivated; the crop obtained from the soil would pay the cost of the work. The fruit would of course vary; but a very intelligent farmer, whom experience enables to judge, thinks that an orchard of the Tallman Sweeting would produce on an average, ten bushels per tree yearly. He frequently obtains much more, often double, and sometimes triple that quantity. The product of an acre would thus be a thousand bushels; the cost would be the interest on the land, or about four dollars and fifty cents, which would furnish the apple on the tree at about half a cent per bushel. This is better than raising potatoes; and would save much tedious planting, hard hoeing and laborious digging.

Apples ripening in summer would be of great value, as it is quite important in fattening animals, to commence early. The common Sweet Bough would become of the best at that season, as it produces good and uniform crops. The summer Rose, a sweet apple of excellent flavor, which ripens about the same time, is, according to Manning, "a great bearer," and would consequently be very valuable. The Tallman Sweeting would certainly be one of the very best for late fall and winter use, as it is a fruit of uncommon richness and uniform productiveness, commonly bearing abundantly every year. But other varieties, particularly adapted to this purpose, are a desideratum.

*It is of course taken for granted that the holes in this case are large—several feet across; and not so small as are usually dug; or barely sufficient to admit the roots, which cannot readily penetrate the hard subsoil surrounding the hole, and are thus limited in growth, to the great injury of the tree.

From the Princesse Anne Herald.

SILK CULTURE.

To the people of Maryland.—The results of interesting communications and discussions in the late convention at Baltimore, are eminently calculated to augment and stimulate the pre-existing animation on the great object of that assemblage, and to extend the range of their operations. They were, indeed, of thrilling import to Maryland, and most particularly to the Peninsular counties of the Eastern Shore.

With very deep concern, I have long regarded the establishment among us of the Silk Culture, and would have engaged in it years ago had not my time and attention been occupied by other objects of improvement.

When we witness the languishing condition of our agriculture—the impoverishment of the land throughout the interior, and the large proportion of our most helpless inhabitants thrown out of employment by the interposition of cotton manufactures—whilst our soil, climate and population are peculiarly adapted to a staple of superior value from its celerity and facility of production, and

fabrication—with its greater comfort and durability in use, the sensitive patriot and philanthropist cannot but marvel at the protraction of that *impetus* which now universally impels our most sagacious countrymen, whilst anticipating with ineffable pleasure its beneficent effects and influences.

Advanced as I am in the vale of life, I hope and trust that I may see the day when the culture of silk shall prevail in our State—when its growth and manufacture shall be so extended among us that it shall not only become the common raiment of our people, but also supply a surplus of large amount for exportation. With this design, and an ardent wish to promote the prosperity of our State, and the peninsular in particular, it will be my purpose to employ my poor ability from time to time in diffusing facts and illustrations, with intent to establish, in the general intelligence and estimation, the policy, practicability and profit of this adopted branch of our husbandry. And in obedience to a sense of duty, I will endeavour to demonstrate that every proprietor of a single acre, and every renter or leaser, even for a single year will be benefitted by the appropriation of a portion of his cultivation to the production of *silk worms food*, until the culture shall be acclimated and fully rooted in every section and subdivision of our common country.

Very respectfully and faithfully,

LITTLETON DENNIS TEACKLE.

Dec. 20, 1838.

SILK IN LOUISIANA.—The New Orleans Bee states a singular fact, which will be new to our northern public. Mr. Covington, in the parish of St. Tammany has for years, cultivated the *morus multicaulis* to great extent, and some ten or twelve planters in that parish have together 100,000 trees. The climate and soil are admirable for this culture, and Mr. C. believes silk will soon be a great article of commerce in that state.

We were much gratified last week by the receipt of a handsome present, from Mr. Samuel Chew, a wealthy and enterprising farmer of this county. The article, presented was a silk stock, the whole of which from the raw materials, down to its finish, was the produce of Mr. Chew's plantation. The stock is beautifully fabricated, and in every respect is equal if not superior to imported articles of the same description. Those who desire conviction of the truth of this statement, by observation, can refer to our neck, and they will be relieved of all skepticism on this subject. —*Lex. Int.*

From the Ohio Herald and Gazette.

GREAT PRODUCT OF BADEN CORN.

MR. HARRIS:—I am induced to send you an account of the product per acre of the Baden Corn, of which you noticed some time since a specimen stalk at my Store. That was grown by Sheriff Henderson, and ripened to perfection. Mr. Erwin of Euclid, raised the Baden Corn on $2\frac{1}{2}$ rods of new cleared land in the corner of the field, and the product was at the rate of 218 bushels per acre of shelled Corn. He manured the land broadcast, and planted three in a hill, $3\frac{1}{2}$ feet apart every way. Mr. Crosby of Euclid, also has raised about the same quantity, and with the like success.

Now, sir, it clearly proves that if Farmers will fix their lands properly, and not sparingly use manure, they can raise as much upon one acre as is usually raised upon four. Taking into consideration the badness of the season for cornplanting in this year, and the fact that it has ripened here for two years past, it may now be considered acclimated, and ought to be sought after by our Farmers as the greatest acquisition for their benefit. It rarely produces less than three ears on a stalk, and goes up to ten and twelve ears; and it grows from twelve to fifteen feet high. The best way to plant is in drills, from twelve to fifteen inches apart, and five feet between the rows. The seed can be had at my Store.

Here is an indisputable proof of what Mr. Baden has accomplished by steady perseverance for twenty years in the cause of Agriculture, and his name will be handed down to posterity as a brilliant example of what may and can be done in improving the quantity and quality of the products of the soil for the sustenance of man and beast. Many complain that they cannot get sufficient manure for all their Corn land. Then, I say, curtail the space allotted, and what you do plant, do it effectually and hoe in season, and increase your cultivation of roots, as ruta бага, turnips, sugar beet, &c. The careful feeding of these in a barn yard, where you ought to draw all your disposable rubbish and fodder from the land, that can be converted into manure, will the following season furnish a vastly increased quantity of food for the Corn and other crops. It is hoped for the benefit of Farmers, the advantages of the Baden Corn may be made public, and that papers friendly to Agriculture will give the above an insertion.

Yours respectfully,

JAMES HOGHEON.

CLEVELAND CITY SEED STORE, }
December 17th, 1838. }

From the Yankee Farmer.

RULES TO BE OBSERVED REGARDING THE IMPROVEMENT OF WASTE LANDS.

In the cultivation of wastes the following rules are laid down by the most successful improvers:

1. Not to put in any scheme of improvement without the fullest deliberation nor without the command of an adequate capital.
2. Not to begin on too great a scale, nor until by experiment, it be found that the design is suitable to the soil, situation and climate.
3. When the intention is to cultivate peat moss, not to begin cropping, till at least one season after the drains are completed, and the soil thoroughly reclaimed from superfluous moisture. In low or spongy mosses, a longer time is necessary; and it is desirable to expose the soil to the action of atmosphere during the frosts of winter.
4. To plough or delve peat moss in autumn, that it may be effectually exposed to the winter frosts and rains, and not summer's heat, which hardens it, and prevents its decomposition.
5. Whatever is done, do it *effectually*; not to think of laying on four acres the manure necessary for three; nor the lime, earth, clay and sand or gravel upon two acres that should be employed on one.
6. To carry on the improvement of waste lands, without encroaching upon the dung necessary for the improved part of the farm.

DITCHING.

When bushy grounds, full of strong roots is to be ditched, the Rev. Mr. Elliot, wisely recommends beginning in the winter, when the ground is frozen two or three inches deep.—The surface may be chopped into pieces with a broad axe with a long helve, and the sods pulled out with an instrument made like a dung croom. The farmer may probably hit upon a good time for this work in December, when there happens to be no snow, and when it will not interfere with other farming business.

The lower part of the ditch may be done in the following summer, or autumn. In a free and firm soil, a ditch may be begun with a plough drawn by an orderly team that will keep to the line. This saves labor.

To make a ditch straight, and equal in all its parts, it is recommended that the work be regulated by a frame of slit deal, nailed together, to the exact size of the intended ditch. It may be a rod or more in length, and as wide as the intended ditch.

SWAMP MUD FOR MANURE.

Swamp mud applied on an upland loam, gravel, or sandy soil, will pay the expense of labor in removing it, two for one the first year, as the statement of facts hereafter annexed fully proves.

Last fall a farmer carried several loads of muck on to a knoll of loam, and put it in one heap. In the spring, prior to planting corn, the muck was spread and ploughed under. The crop of corn, where the muck was spread, was large; I thought larger than where barn yard manure was put. A neighboring farmer has made use of muck for several years. The first year he thought it equal to barn yard manure, and its effects were perceptible a much longer time. The soil on which the muck was used by another neighboring farmer, for manuring corn in the hill, which was used in the following manner: A row of each alternately, one of muck, one of barn yard manure, and one of hog manure. He assured me the corn manured with the muck was much the best.—The soil, a sandy loam.

A farmer in New York had four acres of gravelly loam, of equal quality, which he planted with corn. Prior to planting the corn, he applied fifty loads of muck per acre, on two acres; these two acres produced him *one hundred and twenty bushels*; the other two yielded him only sixty bushels. The next spring these four acres were sowed with oats and grass seed. The oats were more than twice as large on the two acres dressed with muck, as they were on the other two. The grass for the four succeeding years produced in much the same ratio.—Many other similar improvements might be related. It is presumed that every intelligent and industrious farmer will be satisfied of the utility of muck as manure. These farms which are interspersed with swamps of muck, and uplands either of loam, sand or gravel, may be made at an expense of from five to ten dollars per acre, capable of paying an interest, annually, of one hundred dollars per acre. It is thought that ten dollars, expended with economy, will in most circumstances, be sufficient to cart and spread one hundred loads of swamp manure on an acre.

Those who own farms, situated as just stated, now valued at \$25 per acre, have only to say the

word, and go forward, for one or two years, to convince themselves and their neighbors that they have farms intrinsically worth one hundred dollars per acre.

Why so? it may be asked. Because they will pay a nett profit over and above all expenses, amounting to the interest of one hundred dollars.

Look for a moment at the statement of the New York farmer above. He tells you he applied fifty loads of muck per acre, in the spring, (though the fall is a better time, and the muck is better to be laid on lands in the fall,) which cost him five dollars. On this acre he had an excess of corn of thirty bushels; at 50 cents per bushel, which would leave \$10, nearly enough to pay the interest of \$150, at 7 per cent., and this only the first year. It is worthy of consideration that by taking the muck from the low lands, ditches may be made or improved, so that low lands will produce a bountiful crop of timothy and red top, &c. It is desirable that farmers in different parts would try the utility of the muck on the different summer crops, and inform the public of the results of their labor, all of which are highly useful to the farmer.

COTTON CROP.

The Natchez Courier of December 20th, remarking upon the statements published at New Orleans, relative to a decline in the cotton crop, concludes as follows:

The cotton planters are generally, almost uniformly, sure of sufficient intelligence to understand their own interests and manage their own affairs, without advice from any quarter. It is, therefore perhaps gratuitous for their friends in New Orleans, Mobile, Natchez, or elsewhere, to offer advice in relation to the time when cotton should be sold, or when it should be shipped. But notwithstanding we deem it the duty of the public press to give the most correct information in their power, on this as well as every other subject.

We are persuaded that the whole crop of the United States will not reach 1,400,000 bales. It is very certain that the product of our own State has been more injured by the severe and early frosts, than by the backward spring or dry summer. And if the crop in the region of latitude 32 to 33 has been thus shortened, it surely cannot be out of the way to expect the crop of high latitudes to have suffered in the same degree. We know that the product of Mississippi will be at least one fourth less than that of 1837 and to suppose that Virginia and North Carolina would produce 45,000 bales would be not only contradictory to all our intelligence from that quarter, but also a downright absurdity, when the product of last year (which was an unusually favorable one for the district in the higher latitudes) was but 50,000 bales.

It was supposed that Mississippi produced last year 40,000 bales, and Louisiana 200,000, making 600,000 in the aggregate. If we allow for Louisiana the same as last year, and for Mississippi one fourth less, we will have but 500,000 bales for the two States, instead of 650,000 as assumed by "B."

But speculations are idle. The result will soon be known, and we venture to predict that it will be found that even in Louisiana, where the

crop is supposed to be less injured than in any other State, the product will be 15 per cent less than that of last year.

The assertion that a less quantity of seed cotton will make a bale of 400 lbs. than in former years is a very great mistake, and utterly disproved by facts. Our best informed and most intelligent Planters admit that it required 1600 lbs. this year; whereas last year 1400 were amply sufficient, and it is a common saying among the Overseers, that, "there is less lint in the seed this year, than they ever before knew."

We have no doubt that the receipts at New Orleans this year from the Valley of the Mississippi, will be 175,000 bales short of those of last year.

In regard to the product of Texas, it would be the height of extravagance to put it down at 15,000 bales. If it equals 10,000 bales it will far surpass all reasonable expectations. Yet "B" estimates it at 53,000 bales! This assertion alone is sufficient to discredit all his other statements.

The following estimate from the best evidences we can obtain will not be very wide of the true result of the cotton crop of 1838.

Virginia and North Carolina,	20,000
S. Carolina and Georgia,	450,000
Florida,	90,000
South Alabama,	255,000
Louisiana and Mississippi,	350,000
North Alabama and Tennessee,	70,000

Total in U. States. 1,395,000

WESTERN TOBACCO CROP.

The New Orleans Price Current of the 17th ult. says:

We have taken the most scrupulous care as to the sources from which we have information of the crop of Tobacco soon to be brought to market, the substance of which is, that in the Green River county, Ky. the crop will fall very little short of an average one; and in the upper part of the State, will be, it is generally believed, nearly as large as that of last season, which however, was smaller than usual. On the Cumberland river, above Nashville, from the lesser quantity planted, summer drought, and early frost, it will be cut short one half. In the barrens of Kentucky, nearly two thirds of the usual amount is expected, and from that portion of Kentucky immediately bordering on the Ohio river, and commencing some distance below Louisville, not much more than one half.—In Missouri, the season has been a good one in every respect; the crop will be short of last year's and the quality will be better. The computed quantity now in the interior is 3500 hhds. nearly one half of which is composed of stems and strips. Basing our estimate mainly on the above, we think the receipts here, for this season, cannot vary much from 25,000 hhds. This estimate rather exceeds that of most persons, as did ours of last year, but we were then correct, and trust that the close of the present season will prove us to be nearer so again.

Sugar Crop.—The Planter's Banner, of Franklin, (Attakapas) of 13th ultimo states that in three weeks the process of sugar making will be completed. Many of the planters have already finished

and are busily engaged in shipping. Although the crop is considered a good one, still it will fall far short of what was, some weeks ago, anticipated; as the loss by frost, particularly on the coast, has been severe. The sugar which has been manufactured in Attakapas, is said to be of very fine quality—finer than that of any former season.

Auction Sale of *Morus Multicaulis* Trees.—

The sale at William H. Franklin's auction room this day was attended by a great concourse of purchasers from this and the adjoining states, and the trees, which were all trimmed, sold at an average of 22 to 25 cents per foot. Many times the number could have been readily disposed of at these prices, and after the sale still higher rates were offered for private contracts. The stock of trees is now so small that it is supposed no more can be brought to auction.—*N. Y. Star.*

WASHINGTON, (O.) Nov. 3. MILK SICKNESS.

A probable discovery. This is a disease peculiar to many parts of Ohio and the other Western States, and the cause has hitherto been unknown. During the present season, it has been unusually common, and terminated, in many instances, fatally.

Mr. John Rowe, for many years a citizen of this county, a careful observer and a practical farmer, being persuaded that he knew the herb that caused the sickness of cattle, determined to attempt an experiment. Accordingly, on the 1st of October, he selected a sucking calf that had never been out of his clover field, gathered a quantity of the herb, and commenced feeding the calf. For a time it would not eat of the herb; but nothing else being given it, by sprinkling salt upon it, and cutting it fine, the calf ate plentifully. The herb being given it regularly, in about two weeks the calf gave evident signs of being affected. That it had what is usually called "*The Trembles*," does not admit of a doubt. The calf has been seen by many; and all who are familiar with the disease admit the fact. The calf has since died of the experiment. Mr. Rowe's family made use of the milk of the cow during the whole season.

Dr. Howells, an intelligent physician of this place, has since been engaged in making other experiments. A gill of the extract was given a pig, at different times, which caused death in about twelve hours. On examination, it was found that inflammation had been produced, and that the lining membrane of the stomach bore evident marks of mortification. Dr. H. is progressing with other experiments.

The herb that has been used is one that grows, not in prairies and low ground, but on the higher land adjoining. It grows from six inches to thirty in height, the leaves putting forth about two-thirds of the upper part, of the top of which is a bunch of small blossoms. The leaves have a stem of about an inch in length. The botanic or common name of the herb is unknown.

A portion of this herb has been forwarded to Dr. DRAKE, of Cincinnati, for the purpose of being analysed, and we hope soon to hear more of this matter. From the experiments made, and those that are in progress, it is highly probable

that a valuable discovery has been made.—[Circulator Com.

TO THE PUBLIC.

I have discovered the herb which imparts the milk sickness to our cattle in this and other sections of the Western country.

I have made an experiment, by feeding it to a healthy calf. The effects correspond in all their phenomena, to what has been observed to characterize the disease when it has taken hold of its victim. I made this discovery on the first day of this instant, (October, 1838.) I am not sufficiently skilled in history to furnish even a sensible description of this poisonous herb, but have taken steps to ascertain through the medium of chemical analysis, its properties. As soon as this analysis shall have been completed, the public shall hear from me again.

JOHN ROWE,
Fayette county, Ohio.

MOTION IN VEGETATION.

The rotation of the earth, according to the theory of Sir Richard Phillips, has a very important influence on the growth of plants; and it is rendered certain by the experiments of Mr. Knight, that they owe the peculiar direction of their roots and branches almost entirely to this force.—That gentleman fixed some seed of the garden bean on the circumference of a wheel, which in one instance was placed vertically, and in the other horizontally, and made to revolve by means of another wheel worked by water, in such a manner that the number of revolutions could be regulated. The beans were supplied with moisture, and were placed under circumstances favorable to germination. The greatest velocity of motion given to the wheel was such, that it performed two hundred and fifty revolutions in a minute. It was found that in all cases the beans grew, and that the direction of their roots and stems was influenced by the motion of the wheel. When this local centrifugal force was made superior to the earth's motion, which was supposed to be done when the vertical wheel performed one hundred and fifty revolutions in a minute, all the radicles, in whatever way they were protruded from the position of the seeds, turned their points outwards from the circumference of the wheel, and in their subsequent growth receded nearly at right angles from its axis; the germens, on the contrary, took the opposite direction, and in a few days their points all met in the centre of the wheel. When the local motion was made merely to modify the force of terrestrial motion in the horizontal wheel, where the greatest velocity of the revolution was given, the radicles pointed downwards about ten degrees below, and the germens as many degrees above the horizontal line of the wheel's motion; and the deviation from the perpendicular was less in proportion, as the motion was less rapid. These facts afford a rational solution of this curious problem, respecting which different philosophers have given such different opinions; some referring to the nature of the sap, as De la Hire; others, as Darwin, to the living powers of the plant, and the stimulus of air upon the roots. The effect is now shown to be connected with mechanical causes; and there seems no other power in nature to which it can with propriety

be referred, but the motion of the earth, which acts universally on all its parts, and tends to dispose the whole to take a uniform direction.

THE MARYLAND SILK COMPANY OF BALTIMORE

Offers for sale 25,000 genuine *Morus Multicaulis* trees, 20,000 *Alpin*, *Canton*, and other varieties.
d 25 L. J. COX, President.



Wm. Prince & Sons will make sales of Trees and Cuttings of the Genuine Chinese *Morus Multicaulis*, *Morus Expansa*, *Alpine*, *Broussa*, *Canton*, and other varieties, deliverable to the purchasers at each period in the Spring, as is convenient to them, and will enter into contracts accordingly. Prices and terms for the trees and cuttings will be forwarded to all who may apply for them by mail, as well as prices of silk worm eggs, mulberry seeds, &c. The *Multicaulis* trees are remarkably vigorous, and as we first imported the genuine tree, purchasers are sure of obtaining the true kind. It is from this cause, and from the great attention aid by them, that the trees they have sold have given universal satisfaction.
Flushing, near New York—Jan. 1. 1m

SILK AGENCY OF BALTIMORE.

The undersigned has opened the Spacious Room, No. 194 Baltimore street, for the purpose of Receiving, Exhibiting, and Selling on Commission all useful and approved articles connected with the growth, production and manufacture of American Silk. This establishment is designed also to concentrate information and improvement on the subject and advancing this great national enterprise. The following are among the articles which will be constantly for sale, viz:—

Morus Multicaulis, *Canton*, *Alpine*, *Asiatic*, *Brussa* and other approved MULBERRY TREES, to produce food for Silk Worms.

Cocoons of every variety.

Eggs for producing Silk Worms.

MACHINERY for Reeling and Manufacturing.

Periodicals and Standard Works for giving information.
jan 1 3t* E. CENTER.

CHINESE MULBERRY TREES.

American Silk Agency, No. 95, Walnut st. Philadelphia. The subscriber having opened a permanent Agency for the purchase and sale of all articles connected with the culture and manufacture of Silk in the United States, offers for sale all the different varieties of MULBERRY TREES, suitable for raising the SILK WORM; viz: *Morus Multicaulis* *Alpine*, *Brussa* *Multicaulis* Seedlings *Morus Expansa*, *Multicaulis* Cuttings, Improved Italian Trees, &c. Also, Cuttings from Norton's Virginia Seedlings, and Cunningham's Prince Edward GRAPE VINES. These vines produce an abundant crop of fruit, warranted not to rot or mildew and are fine for the table, and capable of yielding the finest wines.

S. C. CLEVELAND, Agent.

SPLENDID BLOODED STOCK FOR SALE.

The proprietor of Covington farm will dispose of the following fine bulls on reasonable terms, viz.

One bull two and a half years old.

One do. six months old.

of the improved Durham short horn breed; the dam of the first was got by the celebrated bull Bolivar; for size, form and beauty they are not surpassed by any animal in the state.

Three Devon Bulls, one of which is seven years old next spring, and the largest Devon in the State. The Devons are from the stock of the late Wm. Patterson, and of undoubted purity.

Two half Devon bulls.

Two bulls half improved Durham short horn, and half Devon.

One splendid bull, a cross of the Bakewell, Alderney and Devon.

One bull, half Alderney and half Holstein.

These fine animals may be seen at Covington farm, near Petersville, Frederick county, Md. on application to James L. Hawkins, Baltimore, or to

se 11 tf FREDERICK FLEET, Manager.

FOR SALE,

A valuable FARM of prime soil, on the Western Run in Baltimore county, about two miles north west of the 14th mile stone of the Baltimore and York turnpike road, and at the same distance from the depot of the Baltimore and Susquehanna rail road, at Cockey's tavern, in a rich, highly cultivated and healthy tract of country.

This farm contains from 260 to 270 acres, having a full proportion in wood, much of which is building timber, peculiarly valuable in that neighborhood; is in the best state of cultivation; a considerable part in productive timothy meadow, and the residue of the arable land, not in grain, is well set in clover, the whole under good fencing, laid off into convenient fields, each of which is well watered. The farm has a large quarry of excellent building stone. There are on the premises an apple orchard of select fruit trees, which seldom fail to bear abundantly; a valuable mill seat on the Western Run, with a race already dug. There is no location in the country more favorable for a grist mill, having the advantage of a rich and thickly settled neighborhood, and a good public road leading thence to the turnpike road. Buildings substantial and convenient, being a STONE DWELLING, and kitchen of two stories; a large stone Switzer barn, with cedar roof and extensive stabling below; large hay house and stable for cattle; stone milk house near the dwelling, with a spring of fine never failing water, with other out-houses. On the country road near the mill-seat a good house and shop for a mechanic, under rent to a good tenant. It is well known the lands on the Western Run are in every respect equal, if not superior to any in the county. Adjoining or near are the lands of Col N. Bosley, Daniel Bosley, Thos. Matthews and others. The water power, with about 20 acres of land, is so situated that they may be detached and sold separately, without injury to the rest of the farm for agricultural purposes. Terms of sale will be liberal. Apply to

NATHANIEL CHILDS,
on the premises, or to

oc 23 tf WILLIAM J. WARD,
Fayette, near Calvert st. Baltimore.

TO THE PUBLIC.

Try the New Agricultural Establishment in Grant-street, next door to Dinsmore and Kyle.

Every article warranted to be first rate. The subscribers, grateful for past favors, take this early opportunity of returning their thanks to their customers and the public in general, and beg leave to inform them that they are now provided with a very extensive stock of newly manufactured AGRICULTURAL IMPLEMENTS, suitable to meet the call of Farmers, Gardeners, Merchants, Captains of vessels, and others, viz: 1000 Ploughs, assorted sizes, from \$4 to \$15 each, comprising of the old common Bar Shear, Winand's Self Sharpener; Woods & Freeborn's patent, all sizes, "Davis," "Sinclair & Moore's" improved Hill Side Ploughs, highly esteemed for turning the furrow down hill, with wrought or cast shears; Wheat Fans, of various sizes and patterns, from \$15 to \$50 each, warranted to separate the garlic from the wheat; Corn Shellers, from \$12 to \$20; Cutting Boxes, from \$7 to \$50 each; Corn and Tobacco Cultivators, large and small; Expanding do., Wheat Cradles warranted to have fingers of the natural growth, and Grass Seythes, &c. &c.; Castings, of all descriptions and patterns, by the lb. or ton, to suit customers, allowing a liberal discount to merchants buying to sell again—all of which will be furnished on the most pleasing terms and every article warranted to be of the best quality, in proportion to the cost price. All orders by mail or otherwise shall be duly attended to with the greatest despatch.

We would particularly call the attention of Country Merchants and others, wishing to purchase agricultural implements to sell again, to the fact, that we will furnish them with articles on better terms than they can be supplied at any other establishment in the city. Our assortment is complete and as varied as that of the most extensive concern in Baltimore.

We have also connected in its operations with the above branch of business a complete assortment of FIELD AND GARDEN SEEDS, kept by Thomas Denny—Also Garden and Farm Tools, of various sorts and of the choicest collection, which will enable our customers to have filled entire all orders in the Agricultural and Seed Departments. mh 26 JOHN T. DURDING & Co

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every Monday

	PER	FROM	TO
BEANS, white field,.....	bushel.	1 25	—
CATTLE, on the hoof,	100lbs	7 50	9 50
CORN, yellow	bushel	95	—
White.....	"	95	100
COTTON, Virginia,.....	pound	14	15
North Carolina,.....	"	14½	15
Upland,.....	"	9½	11
Louisiana ——— Alabama	"	15	16
FEATHERS,.....	pound.	55	—
FLAXSEED,.....	bushel.	1 12	—
FLOUR & MEAL—Best wh. wh't fam.	barrel.	10 00	10 50
Do. do. baker's.....	"	—	—
SuperHow. st. from stores	"	8 00	8 12
" wagon price,	"	7 75	7 75
City Mills, super.....	"	8 12	8 25
" extra	"	8 50	—
Susquehanna,.....	"	—	—
Rye,.....	"	5 50	—
Kiln-dried Meal, in hhd.	hhd.	19 00	—
do. in bbls.	bbl.	4 00	—
GRASS SEEDS, wholes. red Clover,	bushel.	14 00	16 00
Kentucky blue	"	—	—
Timothy (herds of the north)	"	3 00	—
Orchard,.....	"	2 00	2 50
Tall meadow Oat,.....	"	—	3 00
Herds, or red top,.....	"	90	1 00
HAY, in bulk,.....	ton.	12 00	16 00
HEMP, country, dew rotted,.....	pound.	6	7
" water rotted,.....	"	7	—
HOGS, on the hoof,.....	100lb.	8 75	9 25
Slaughtered,.....	"	8 00	8 50
HOPS—first sort,.....	pound.	9	—
second,.....	"	7	—
refuse,.....	"	5	—
LIME,.....	bushel.	32	33
MUSTARD SEED, Domestic, —; blk.	"	3 50	4 00
OATS,.....	"	—	—
PEAS, red eye,.....	bushel.	—	1 12
Black eye,.....	"	1 00	1 12
Lady,.....	"	—	—
PLASTER PARIS, in the stone, cargo,	ton.	4 37	—
Ground,.....	barrel.	1 50	—
PALMA CHRISTA BEAN,.....	bushel.	—	—
RAGS,.....	pound.	3	4
RYE,.....	bushel.	88	95
Susquehanna,.....	"	—	none
TOBACCO, crop, common,.....	100lbs	4 50	5 00
" brown and red,....	"	5 00	6 00
" fine red,.....	"	9 00	10 00
" wrappery, suitable	"	—	—
for segars,.....	"	10 00	20 00
" yellow and red,....	"	10 00	12 00
" good yellow,.....	"	10 00	14 90
" fine yellow,.....	"	12 00	15 00
Seconds, as in quality, ..	"	6 00	—
" ground leaf,....	"	7 00	9 00
Virginia,.....	"	6 00	9 00
Rappahannock,.....	"	—	—
Kentucky,.....	"	6 00	8 00
WHEAT, white,.....	bushel.	1 75	1 78
Red, best	"	1 70	1 75
Maryland	"	1 50	1 70
WHISKEY, 1st pf. in bbls.....	gallon.	44	45
" in hhd.....	"	41	—
" wagon price,	"	—	41
WAGON FREIGHTS, to Pittsburgh, ..	100lbs	2 00	—
To Wheeling,.....	"	2 25	—
Wool, Prime & Saxon Fleeces,...	pound.	50 to 55	—
Full Merino,.....	"	45 50	—
Three fourths Merino,.....	"	40 45	—
One half do.....	"	35 40	—
Common & one fourth Meri.	"	35 40	—
Pulled,.....	"	30 33	—
POTATOES, 60 to 70 cts. a bushel.			

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,.....	barrel.	—	—
BACON, ham, new, Balt. cured....	pound.	15	—
Shoulders,..... do.....	"	13	—
Widdlings,..... do.....	"	13	—
Assorted, country,.....	"	12½	—
BUTTER, printed, in lbs. & half lbs.	"	31	50
Roll,.....	"	25	31½
CIDER,.....	barrel.	1 75	2 00
CALVES, three to six weeks old....	each.	5 00	6 00
COWS, new milch,.....	"	25 00	40 00
Dry,.....	"	12 00	15 00
CORN MEAL, for family use,.....	100lbs.	1 75	—
CHOP RYE,.....	"	—	1 60
EGGS,.....	dozen.	37½	50
FISH, Shad, No. 1, Susquehanna,	barrel.	9 75	10 00
No. 2,.....	"	9 25	—
Herrings, salted, No. 1,.....	"	6 00	6 50
Mackerel, No. 1, ——— No. 2	"	11 00	13 50
No. 3,.....	"	7 25	7 37
Cod, salted,.....	cwt.	3 25	3 37
LARD,.....	pound.	13	13½

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

		VIRGINIA.
U. S. Bank,.....	par	Farmers Bank of Virgi. par
Branch at Baltimore,.....	do	Bank of Virginia,..... do
Other Branches,.....	do	Branch at Fredericksburg, do
MARYLAND.		Petersburg,..... do
Banks in Baltimore,.....	par	Norfolk,..... do
Hagerstown,.....	o	Winchester,..... do
Frederick,.....	do	Lynchburg,..... do
Westminster,.....	do	Danville,..... do
Farmers' Bank of Mary'd, do	do	Bank of Valley, Winch. par
Do. payable at Easton,.....	do	Branch at Romney,..... par
Salisbury,..... 1 per ct. dis.	par	Do. Charlestown,..... par
Cumberland,.....	par	Do. Leesburg,..... par
Millington,.....	do	Wheeling Banks,..... 2½
DISTRICT.		Ohio Banks, generally..... 3
Washington,.....	Banks, ¾ p.c.	New Jersey Banks gen. 3
Georgetown,.....	do	New York City,..... par
Alexandria,.....	do	New York State,..... do a ½
PENNSYLVANIA.		Massachusetts,..... 1½ a 2
Philadelphia,.....	par	Connecticut,..... 1½ a 2
Chambersburg,.....	½	New Hampshire,..... 1½ a 2
Gettysburg,.....	do	Maine,..... 1½ a 2
Pittsburg,.....	2½	Rhode Island,..... 1½ a 2
York,.....	½	North Carolina,..... 3 a 3½
Other Pennsylvania Bks. 2	do	South Carolina,..... 4 a 5
Delaware [under \$5].... 4	do	Georgia,..... 5 a 5½
Do. [over 5]..... 1½	do	New Orleans,..... 7 a 8
Michigan Banks,..... 10	do	
Canadian do..... 10	do	

BARHAMVILLE INSTITUTE,

With 10,000 *Morus Multicaulis* Trees, for sale.

The establishment now offered for sale, is called Barhamville. It is beautifully and eligibly situated about 2 miles from Columbia, (the capital of S. C.) in a region of country termed the Sand-Hills. The grounds comprehend between 500 and 600 acres; they are well timbered, (chiefly pine and small oak); and about one half consist of what is termed bottoms, rendered perfectly dry and tillable, by at least 6000 yards of ditching, most of which measures 5 feet in width by 3½ in depth. There are upwards of 70 acres completely ditched, now ready for being broken up, which I value at \$50 per acre.

The Institute buildings are situated upon a high range of Sand-Hills, proverbial for health, inasmuch that the neighborhood affords a retreat for many of the families of Columbia during the summer months. It was on that account that the site was selected for the business (a female Boarding School) to which the buildings have been dedicated. The water is excellent, supplied by two pumps—besides which there are two excellent springs.

The centre building is of wood, well plastered, and neatly finished throughout, and measures 54 feet square, three stories high; the upper room or attic story being 15 feet in height. Beneath this building is an excellent cellar, above ground. The wings attached to the centre building are 100 feet each in length, the one 24 and the other 34 feet in width. The southern wing is of brick,

well plastered, two stories high, well finished throughout, having an excellent cellar above ground. The northern wing, recently built, is of wood, ceiled throughout. It is three stories high, with an attic story equal in its area and superior in its height to the three lower stories. The basement story of this wing is of brick.

A mahogany spiral stair-case [of superior workmanship, which with other improvements attached, cost upwards of \$2500, ascends throughout the centre building. From the extremity of the brick wing, and at a right angle with it, proceeds a building, (the academic edifice) 134 feet in length by 34 feet in width, two stories high, well ceiled throughout, and having an excellent cellar above ground.

Besides fire-places, the whole establishment, with the exception of the brick building, is warmed by air-furnaces, on the most improved plan, similar to that by which Grace Church and many public and private edifices in Philadelphia are warmed.

The expense of erecting the apparatus, &c. amounted to upwards of \$2500.

The area of all the floors in these buildings, is, by measurement, upwards of 100,000 square feet. On the Institute buildings is an insurance for \$15,000.

There are also, at a small remove from the main buildings, two residences, cottage-built, neatly finished; the one containing 4, and the other, 2 rooms.

Within 300 yards of the Institute, on an eminence, is the mansion built by me for the late John La Taste, repurchased by me from his family. This is a highly improved residence. The house stands upon brick pillars about 5 1-2 feet from the ground; the four lower and two upper rooms being well finished; out-houses, &c. in good order.

It is unnecessary to say, that the out-buildings of the institute are, in every respect, correspondent to the main building. The garden has been improved at a considerable expense.

With the above establishment, every way fitted for an extensive Silk Factory, may be had 10,000 *Morus Multicaulis* trees, 500 of which are 6 years old, all of vigorous growth, which, at the present time, will yield upwards of 200,000 cuttings; they are now regularly planted, 12 feet by 12. 100,000 cuttings, of two and three eyes each, are now being set out, well secured from frost by a ground dressing of long manure.

When the intrinsic value and resources of the above establishment are taken into consideration, and when it is recollected that in one year, from the present time, Columbia will be connected with Charleston by a rail-road, now in a vigorous state of progression; when it is, furthermore, recollected, that this rail road is to connect the sea-board with the great north-west, it may be said that the property now offered for sale, presents inducements to individuals or companies, desirous of embarking extensively in the Silk business, unsurpassed by any thing offered in this country.

The buildings, collectively, cost upwards of \$60,000, and the lands, with the improvements bestowed upon them, will command at auction \$25 per acre, and, as it respects the value of the trees, an estimate can be easily made by reference to the prices they are now commanding in the Northern and Middle states.

I will sell the above at two-thirds of the original cost, on the following terms: one-third cash, and the remaining two-thirds payable in one and two years, with interest from time of sale, mortgage and approved security and policy of insurance assigned.

ELIAS MARKS, M. D.

Barhamville, near Columbia, S. C.

I will dispose of 100,000 cuttings (or 200,000 eyes) each cutting to consist of 2 or 3 eyes, hermetically sealed at each end with a composition of beeswax and rosin. Price 2½ cts. per eye, delivered in Columbia. E. M. de 18 6t

SILK AGENCY,

Corner of E. and 7th streets, Washington City, D. C.

The subscriber having commenced an Agency for the purchase and sale of SILK MULBERRY TREES, and all articles connected with the growing of Silk, offers for sale the following varieties of Mulberry Trees at Baltimore prices, viz. *Multicaulis*, *Alpine*, *Broussa*, *White Italian* and *Canton*; also *Mammoth White Silk Worm's Eggs*, warranted to be of superior quality. All the recent publications on silk growing for sale, and subscriptions received for the various periodicals devoted to that subject. no 20 J. F. CALLAN.

DURHAM STOCK AND BAKEWELL RAMS.

The subscriber has for sale seven full bred Durham bulls, cows and heifers, one cow of the Sims breed, and 4 Bakedwell Rams, which he will sell at fair prices. Particulars next week. EDWARD P. ROBERTS, Baltimore, Md. ja 8

THE FARMER & GARDENER

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, E. P. ROBERTS AND SAMUEL SANDS—EDITED BY E. P. ROBERTS.

No. 38.

BALTIMORE, MD. JAN. 15, 1839.

Vol. V.

— THIS publication is the successor of the late
AMERICAN FARMER
and is published at the office, at the N. W. corner of
Baltimore and North streets, over the Patriot office, at two
DOLLARS AND FIFTY CENTS per annum, if paid within one
month from the time of subscribing, or \$3 if after that
time. All letters to be post paid.

BALTIMORE: TUESDAY, JAN. 15, 1839.

AN ENLIGHTENED MOVEMENT.

Mr. Bruce moved the following resolution :—
*Resolved by the General Assembly of Mary-
land, That the Treasurer of the Western Shore*
be and he is hereby authorized and required to offer a premium of fifty thousand dollars for an effectual remedy against the wheat worm or Hessian fly.

We were highly gratified a few days since, in reading the above resolution in the proceedings of the House of Delegates of the legislature of this State, and tender to Mr. Bruce our unfeigned thanks, and we trust he will receive those not only of every farmer in Maryland, but in every state in the Union; for richly does he merit to be cherished by every man who feels an interest in the well-being of the community, as a wise and provident legislator. We say this with, we trust, a just appreciation of the value of the measure he has proposed, and hazard nothing in saying that if he can effect the object contemplated by his resolution, it will, on an average, save to the State one-fourth of her great annual staple. Looking, then, at the benefits to accrue to the people of Maryland by the measure thus patriotically introduced, in the light in which we believe it should be viewed, we feel great solicitude in its fate, and would hope, that in its consideration, all party influences will be stayed, and for once, that our legislature will merge the feelings of the partizan in the patriot, and come together like brethren of the same community, whose identity of interest being the same, feel that in exalting the state, they elevate themselves, and render an acceptable service to their common country.

It was remarked by an officer of the British army captured by the lamented Perry on Lake Erie, in reply to a political question put to him, "When our country is in danger we do not stop to talk politics." This was a noble reply. While it conveyed a *rebuke* to our countryman for asking an indelicate question, it proved that the Briton fully

realized his relation as a subject—that he was aware, it was his duty to eschew politics when his country was in danger, and to come to her rescue, with the freshness of patriotism—of that patriotism, which looks with the gaze of an eagle's eye to the interest, honor and glory of his country—and we hope that the members of the Legislature of Maryland, will follow the example of this generous hearted Briton, in considering this, as well as all other measures intended to benefit the agriculture of the State, without permitting the malign influences of party to divert them from the path of duty.

We insert to-day a communication from an esteemed friend, giving an account of four shoats killed by him the present winter, at the age of 8 months and 11 days, the average weight of which is 166 pounds. From the account detailed by him, the reader will perceive that they received but moderate feeding while being reared, and that while fattening, nothing but refuse corn was given to them; and we think he will conclude with us, that had they been *better* and longer fed—that is, had they been pushed from the beginning, and the killing delayed three weeks, or until they were 9 months old, their average would have exceeded 200 lbs. The boar by whom they were sired, is one of the best of the hog kind we have ever seen, in every point which imparts value; he was imported by that public spirited gentleman, Rezin D. Shepherd, Esq. Of their mother it is enough to say, that she is a Chester county hog, for all intelligent farmers to set a proper estimate upon her value; as there is no one acquainted with the relative merits of the various breeds of hogs, but know that these stand very high; and we are sure that the cross with Mr. Shepherd's admirable boar, will greatly improve the stock.

We have now several pigs by the same boar and sow, for sale on commission, and should be happy to be the means of selling them to some farmer, who would *take care of them*, and give us a report of them when killed, as we are certain if well kept, their breed will tell a tale that will read well in swinish history.

In conclusion, we have to express our regret that our correspondent did not use his own prop-

er signature, as we are precluded by the *incognito* to he has thought proper to adopt, from following the dictates of our heart, in calling them after him, believing that he has, by his judicious cross, created a breed of hogs that no gentleman need be ashamed to see bear his name.

Stock for Sale.—The reader is referred to the advertisement of that celebrated old breeder, Mr. John Barney, or Philadelphia, offering his stock of Durham and other cattle, and a part of his Bakewell sheep for sale. Mr. Barney is induced to do so in consequence of having leased out his *Neck farm*, near Philadelphia, and his recently purchased farm in Delaware not being in a condition to receive stock of such value. To gentlemen who may wish to obtain stock of purity and good points, the present offers an excellent opportunity, as in the deservedly high reputation of Mr. B. as a breeder, and man of honor, they will have a guaranty of getting good animals.

Having mentioned that Mr. Barney had leased out his *Neck farm*, we may as well add its *size* and *price*. It consists of barely 60 acres, and he has leased it for 10 years, at \$1000 per year—a goodly price enough; but not too much. The reader from this, will be able to form an idea of the value of land in the vicinity of Philadelphia, and to form his own judgment what proximity to a good market, is calculated to do for the landholder.

To Subscribers.—Our agricultural subscribers will confer a favor upon ourselves, as well as the country, by communicating through our columns the results of their experience in farming. Those of them who have promised us papers upon various topics connected with the subject, we would respectfully remind that the present is the best time to fulfil their promises; that in farming, as in every thing else, delays are dangerous. Let none be deterred from writing, for each has something to communicate that would find a thousand gratified readers, and as to the apology that we often hear urged by farmers for not writing for our journal—that they are not skilled in the art—with men of sense it has no weight—as plainness of diction, is the best garb that men's thoughts were

ever dressed withal. For ourself we take more pleasure in reading the homespun communications of a straight forward practical farmer, than we do in perusing the fine drawn essays of the whole tribe of theorists put together.

For the Farmer and Gardener.

MR. ROBERTS—Dear Sir:—Having noticed in the Farmer and Gardener several instances of the successful rearing of pigs by feeding apples, I was inclined to try it during the past season. In July or August, as soon as the apples began to fall I commenced feeding four, and continued it until November. After my apples were gone, I fed them on *cob-meal*, (as it is called, composed of corn ground with the cob) which was boiled and fed in the form of slop.

For the last month they have been fed on "nubbins" of corn, separated from the crop in husking as unfit for housing with it.

They were killed a few days since, when eight months and 11 days old, and weighed as follows: 148, 157, 172, 187—total 664 lbs. or an average of 166 lbs. They were by Mr. Shepherd's imported boar, now at Mr. Betzhooover's, and out of a Chester sow.

It may be proper to remark, that they had a part of the slop from the kitchen while being fed on apples, and were not very fat when killed, the rapidity of their growth preventing it. There is undoubtedly much more in the breed of hogs, than farmers generally are aware. I have a pair of the celebrated Berkshires, that I hope to give you a favorable account of hereafter. S.

From the Yankee Farmer.

AGRICULTURAL PAPERS.

Why don't you take an agricultural paper, is a question often put to farmers, and many will answer, O, I take more papers now than I can read.

This is poor management, for the farmer to take papers on various other subjects to the entire neglect of those relating to his own affairs. In selecting his papers, the farmer should by no means overlook those which are devoted to his own profession, and advocate his own interest; on the contrary, these should have a decided preference.—How can a farmer or any other man get thoroughly acquainted with his profession without study and investigation, especially when there is so much to be learned from science, and the slow process of experiment, as in agriculture, that a thousand years would not suffice for one man to learn alone what has already been discovered and recorded.

Go into the study of the minister, lawyer, doctor, or politician, and you will find them with a library of standard works on their professions, and with periodicals that bring them fresh intelligence and new discoveries, and they will still be studying and improving; but look into the library of the farmer and you will look in vain for agricultural works. Should the lawyer or doctor read on all other subjects and neglect his own profession, who would employ him? who would give any confidence in his skill?

Some farmers say their fathers were farmers, and they have always lived on a farm, and they know all about the business, and no one can learn

them any thing, and so they go on in the old way, without one thought as to its being right or wrong, and never dream of improvement.

Now, farmers, *walk up to the chalk*, furnish yourselves with standard books on your profession, take an agricultural paper, and become enlightened in your own affairs, and you will find your business more pleasant and more profitable, and you will be elevated to that important station which American farmers ought to hold—a most respectable, intelligent, independent and important class of citizens, the support and defence of the country. L. O.

BALTIMORE INSPECTIONS IN 1838.

Amount of *Flour and Meal* inspected in the city of Baltimore, during the year 1838, as compiled from the weekly returns of the inspectors:

	bbls.	hf. bbls.
Howard street Flour,	192,014	2,211
City Mills do.	208,194	17,011
Susquehanna do.	15,016	00
Fredericksburg do.	2,663	00
Richmond do.	2,311	00
Pittsburg do. via Pa. Canal,	438	00

Total, 420,626 19,222

There were inspected during the same period, 15,495 bbls. Rye flour, and 1303 hhds. and 6153 bbls. Corn Meal.

We subjoin the inspections for the preceding 8 years, of Wheat Flour in Baltimore:

	bbls.	hf. bbls.	Total in bbls.
1830,	587,875	19,859	597,804
1831,	544,373	21,537	555,141
1832,	518,674	17,544	527,446
1833,	525,620	18,072	533,756
1834,	480,733	17,264	489,365
1835,	516,600	21,333	527,266
1836,	393,934	13,503	400,720
1837,	591,676	14,777	599,064

Amount of *Tobacco* remaining on hand in the State Warehouses in the city of Baltimore, on the 1st Jan. 1838, hhds. 7,414

Amount inspected during the year 1838, 23,626

Total, 36,040

Amount shipped and consumed in 1838, 27,009

Leaving on hand 1st January, 1839, 9,031

The kinds of tobacco inspected during the year 1838 were as follows:

23,464 hhds Maryland
3,477 do Ohio
1,285 do Kentucky
367 do Virginia
33 do Pennsylvania

28,626 hhds.

The amount inspected in 1837 was 31,089 hhds.—*American*.

VALUE OF SWEET APPLES.

The superiority of apples, especially sweet ones, over many root crops, for feeding farm stock, is rapidly becoming known. Their greater cheapness is also becoming established. It has been already shown, in an article published a few weeks since in this paper, that they may be afforded, at a reasonable compensation for the ex-

pense of planting the orchard and the price of the land, at the rate of half a cent a bushel. This of course is only to be expected from good culture and the selection of proper varieties. The expense of root crops, when cultivated in the cheapest manner, may be considered on an average as ten times that amount, or five cents a bushel. Apples are especially valuable, as in addition to feeding other animals, they are so admirably adapted to the fattening of hogs. For the preceding reasons alone, *it may be safe to predict, that in a few years the crop of apples will be considered as only second to the wheat crop.*

But there is an additional reason for attaching importance to apples. This is, that they will probably yet become much more valuable than the sugar beet for the manufacture of sugar. Molasses is already obtained from the juice of sweet apples, by evaporating the cider in its very freshest state by boiling, of a good quantity and much cheaper than by buying it in market. It is true, *sugar* has not been thus obtained; but the molasses is far sweeter and purer than the substance obtained by the same process from the beet; and it is probable that pure sugar may be obtained by as simple a process as it is from the beet. If this proves to be the case, apples, from their superior cheapness, and the very trifling labor of their cultivation, as well as the constant labor required for the culture of the beet, will probably supercede entirely the latter. The experiment appears to be well worthy of trial.—*Genesee Farmer*.

TURNEPS FOR CATTLE.

We have heard that some farmers, during the last summer and fall, particularly during the hottest part of the season, found their cows and oxen to be faint, suffering greatly from the heat, choosing water to stand in where it could be obtained, and lolling or thrusting out their tongues to an unusual extent; and that some of them have attributed this state of things to the turneps which some of them had cultivated for the first time in the previous year, and fed to their cattle the preceding winter. Not thinking that such could possibly be the case, never having perceived any traces of such tendency in the turnip in our extended culture and use of it; and knowing that not a hint of any such effect had been given in the English agricultural books, or treatises on cattle and their diseases, we took the liberty of mentioning the notion to a friend who has been for several years largely engaged in the growth and feeding of turneps to cattle, and we give below the reply. In addition, we may add, that our experience is in perfect accordance with the opinions expressed; and that the only trouble we have experienced in their use, was the want of a more liberal supply.

"If any injurious consequences should happen from the free use of turnips, I shall be likely to discover it, as my cattle are living upon them this winter, as they did last, almost exclusively; each cow receiving about three pecks daily. They have been fed with them more or less ever since I have been a farmer, and my father's cattle ever since I can remember feeding them—(not ruta бага, however, until within the last five years, but the common turnep,) and no such complaint

or injury as you have described has arisen, unless when the cattle did not get enough.

"When cattle are fed freely in the early part of winter, and neglected or forced to live exclusively upon dry hay in the spring, they will starve themselves almost to death rather than submit to such feed; and frequently become so thin and weak, as to be almost unable to walk; but to suppose that the turneps, instead of the scarcity, was the cause of making them faint and to breathe with difficulty, six or perhaps nine months after they had quit eating them, reminds me of a saying of a fortune-teller, whose physician once told him that coffee was a slow poison. 'I should think it must be slow,' was the reply, 'for I have drank it with great perseverance more than forty years.' It is well the opinion of philosophers upon the subject of personal identity is well settled; otherwise they might argue with some show of plausibility that the very blood, bones and flesh, of the beast, had been all changed in less time than is supposed to elapse before the injurious effect of the turneps takes place."—*Ibid.*

Large Hogs.—Three hogs were killed in this town on Friday last by Mr. Wise, which weighed before being butchered, upwards of sixteen hundred pounds. They weighed respectively after they were killed as follows:—502, 483½, 372½.—They were twenty months old and were raised by Mr. DANIEL GITTINGER, near this place. Our side is ahead.—*Fredericktown Herald.*

Domestic Sewing Silk was exhibited and offered for sale at one of the stalls in our market a few days since—it was manufactured by a lady residing on Timber Ridge, a few miles west of this place.—*Win. Rep.*

We know not when we have been more gratified by the reading of a paragraph than we were on perusing the above. It is brief, but conveys a moral to our senses of intrinsic value. It tells us that the ladies have taken the silk culture into their keeping; and we are sure that under their advocacy and influence it must and will prosper. It is but the other day that we recorded the fact of one of the daughters of Georgia being married in a silk dress made of materials raised by herself, and now we learn that a daughter of Virginia has sewing silk in the market as a merchandize article. May God speed their holy work!

From the National Intelligencer.

MEETING OF SILK GROWERS, &c.

A meeting of the silk growers and others friendly to the culture of that article took place on the evenings of the 14th and 17th of December, at the vestry room of the New Baptist Church in this city. The weather was inhospitable, but, notwithstanding, a large audience was in attendance. Numbers of the Delegates from the Baltimore Convention were present; also, many members of Congress and citizens of standing.

Dr. T. P. JONES, being called upon to preside, took the chair, responding to the call with a few pertinent remarks. Mr. JOHN F. CALLAN was appointed secretary.

The Rev. Mr. McLEAN, of New Jersey, being requested to address the meeting, did so very promptly, imparting much information in a manner highly interesting and satisfactory.

Mr. OLMSTEAD, from Connecticut, exhibited a great variety of cocoons, silk in the thread and in the fabric. Amongst other fabrics, silk velvet vesting, and riband, of which three hundred yards per day were woven by a little girl about eight years old. He entertained the company with a variety of topics connected with the subject, and in a style which elicited frequent applause.

The company were also much indebted to Mr. ELLIS, from New Jersey, and to Mr. PARSONS, from Pennsylvania, for the abundant practical knowledge (as regards the raising the trees, the worms, the price of the silk, and comparative cost of production) which they imparted.

Mr. POTTER, of Pennsylvania, and Mr. RANDOLPH, of New Jersey, also addressed the meeting. The Commissioner of the Patent Office, Mr. ELLSWORTH, expressed his decided conviction that the silk culture was destined to become a great and important branch of national industry, and presented his views in an argument of great force and earnestness, proving himself to be intimately acquainted with the details of the subject. He also made some interesting remarks on the new method of manufacturing sugar from the sugar beet, and on the great improvement recently made in the preparation of flax for manufacture; justly showing that these three important products, which were peculiarly adapted to domestic industry, were calculated to produce the most beneficial results, in a moral as well as pecuniary point of view, to the citizens of the United States, as well as to the Indians who were advancing in civilization.

Mr. NOURSE, of this city, informed the meeting that he could testify to the fitness of our soil and location for this business, having tested it, as he observed, by experience; and invited his fellow citizens and others to call upon him for any satisfaction which they might desire upon that point.

Among other items of information detailed, we remember the following as stated by some of the individuals above referred to, viz. that the amount of silk manufactures annually imported into our country is about 25,000,000; the annual amount of sewing silk consumed about \$700,000; the profit of raising trees, at prices, three or four hundred per cent. at the least; that American silk commands 25 per cent. more than any other, &c.

The above proceedings took place upon a motion offered by Mr. FLORENCE HOWARD, as follows:

"Resolved, That the climate and soil of our country are well adapted to the production of silk, and that it will be greatly to the interest of our people that they early engage in its culture."

The motion was carried *nem con.*

The following resolution was then offered by Mr. JAMES HOBAN:

"Resolved, That the thanks of this meeting are due to the gentlemen from abroad who have favored them with their views and experience upon the interesting subject of silk culture."

Before offering the resolution, Mr. H. addressed the meeting in a most impressive style. During his remarks, and at their close, he was warmly cheered by the meeting. He adverted, among

other things, to the comparative progress of the growth and manufacture of cotton with that of silk, and of the comparative effects likely to result. He also paid a handsome compliment to the citizens of the United States for their ingenuity and skill, and for their precocious achievements in arms, literature, and the arts.

This resolution was seconded by Dr. BUCK, who took occasion to commend the gentlemen embraced in the resolution for the valuable services which they had rendered the Baltimore Convention by the information which they had imparted. He remarked that the citizens of Washington, especially the Silk Society, were under great obligations to some of these gentlemen for having ably advocated a motion to adjourn to this city, where the advantages of the public libraries, the patent office, and the presence of members of Congress offered facilities for obtaining and disseminating information relative to their deliberations which no other place could afford. He concluded by moving that the thanks of the meeting be also accorded to Mr. J. HOBAN for the appropriate, eloquent, and patriotic address which he had just delivered; which, by drawing public attention to this important subject, will tend to give it an irresistible impetus.

The resolution, as seconded, was carried by acclamation.

On motion, the meeting adjourned.

SILK.

The following communication is from a gentleman who has been successfully engaged in the culture of silk for several years, and the information which he gives, may be relied upon as correct; it is very important to beginners, and will save them much troublesome inquiry. In the spring of 1835, we had the pleasure of examining a lot of silk raised and reeled by Mr. Smith, and even at that early period, after comparing it with the best specimens of Italian silk in the market, it was pronounced by good judges to be a superior article. It was sold to a manufacturer for seven dollars a pound, when the best imported silk was selling for four dollars.

To the Editor of the *Yankee Farmer*:

Dear Sir,—As I have been engaged for several years in the business of growing silk, I am of course particularly interested, and also feel interested for those who may be engaged in the same. I therefore offer for communication in your valuable paper, the following as the result of my experience:

I have fed worms to some extent for the seven past years; at the first the business was perfectly new, and consequently we had everything to learn from experience; and I have ascertained to my own satisfaction, that being supplied with mulberry trees which will produce both early and late feed, the time to commence hatching the eggs is the first of June. I commence, therefore, as soon as the leaf begins to unfold, which is generally the first week in June, by exposing a quantity of eggs to the air; and I continue to expose them for hatching, every ten days, until the first of August; in this way I have successive crops, which will take the feed as it grows, and also acquire about the same amount of labor through the season, which is far preferable to having a large crop of worms which at first will

require but the help of one or two, and the last age, require twenty or more. When the worms begin to appear, which is generally early in the morning, I place on them tender leaves, to which they will soon adhere; I then draw them off on a paper and keep each day's hatching by themselves, placing the day of the month upon the paper. For a cocoonery, almost any out-building will answer the purpose. I build my shelves in a simple manner, by making use of two inch scantling for posts; I nail on slats to receive the shelves, one foot apart, giving them four feet in width at the bottom, making each shelf two inches narrower as I ascend, that the worms falling from one shelf may lodge on the next below. We remove the worms from the litter immediately after the first, second, third and fourth moultings, and also when they are ready to wind their cocoons, we remove them to shelves prepared. After trying the various methods in use for the accommodation of the worm to wind, we experimented with straw in various ways, and as the result of our experience, have found that the best method for using it, is, to cut rye straw one inch and half longer than the distance between the shelves, tying it in bunches, of some twenty in a bunch, from one to two inches from the bottom; placing them between the shelves and spreading them at the top. I have practiced putting up straw in this way the two past seasons, and find the worms will wind in them very readily, and the cocoons are gathered with the greatest ease and neatness. With regard to reeling, I consider it important that the cocoon should be reeled before it becomes necessary to stifle the chrysalis—for this reason, they will yield more silk, and it is stronger and more nice. I have practiced reeling in this way the two past seasons, and therefore judge for myself.

I offer this for publication for the benefit of those who are going into the business of growing silk and who have had no experience.

Respectfully yours,

TIMOTHY SMITH.

Amherst, Mass., Dec. 2d, 1838.

[From the Yankee Farmer.]

TIME FOR CUTTING TIMBER.

The highly respected Mr. Cooper, late of N. Jersey, is said to have pronounced with great confidence that oak and hickory felled when their sap is vigorously flowing would not be attacked by worms, producing what is called powder post. The cause of this exemption from the depredation from worms, is probably the same as that of its extra-durability.

Sir Humphrey Davy, tells us in his Elements of Agricultural Chemistry, that Mr. Knight, examined the alburnum of different poles of oak in the same forest; of which some had been felled in winter, and others in summer; and he always found most soluble matter in the wood felled in winter, and its specific gravity is likewise greater.

This being the case with the alburnum or sap part of the wood, there can be no doubt of a somewhat similar difference in the heart part of wood.

The foregoing premises being admitted, we may conclude that timber felled in winter while replete with inspissated sap, after being thoroughly seasoned, will, of consequence, be found easier

to work, because more porous, or spongy than that felled in summer, while the sap is more scanty and limited, but the wood of the latter soon becomes more hard, strong and compact, and consequently more durable; and will never be bored by worms because it contains no nourishment for them. In timber felled in winter after being thoroughly seasoned, the essence or saccharine matter of the sap, still remains in it a nutritious and palatable food for various kinds of worms, both on land and under water; and these worms gain their living as they progress, from the wood they reduce to powder.

The vessels of the winter-felled timber replete with sap when felled, are believed to continue open, and like a sponge remains susceptible of imbibing water when exposed, which inevitably produce fermentation and gradual decay.

On stripping timber of its bark in June, Sir H. Davy says: "the reason of the superiority of this timber is, that the concrete sap is expended in the spring in the sprouting of the leaf; and the circulation being destroyed, it is not formed anew; and the wood having its pores free from saccharine matter, is less liable to undergo fermentation from the action of the moisture and air." From a view of the testimony and argument adduced in connexion with the mass of testimony now before the public, we may safely conclude that the true cause of the extraordinary durability of timber felled in barking time is this, that when seasoned it becomes so compact as to become impervious to wet: and also, that it remains secure from the depredation of worms, because it contains no saccharine matter for them to subsist upon.

RHUBARB.

This is one of the many plants which a farmer may have in his garden, and which may be made to contribute to the delicacies of his table and to the health and comfort of his family, with very little expense or labor. The plant is perennial and much resembles in its habits the burdock, though the leaves and stalks may be somewhat larger in a good soil. A dozen good plants will supply a family. The leaf stalks are the parts used. The skin or cuticle is peeled off—they are then cut into quarter or half inch pieces, and used without further preparation, with sugar and spices, like unripe gooseberries, for pies and tarts, which fruit it very much resembles in flavor. It may be used in the spring, and until mid-summer. Medical men ascribe to it a salutary influence on health, particularly to children when used in this way.—The seed ripens about mid-summer, at which time it may be sown.

BUTTER.

To make as good butter in winter as in autumn, and that it may be formed with as little churning, it is only necessary, according to recent experiments, to keep the milk and cream at the proper temperature. With cream at the temperature of 75 degrees, the butter will be ready to take out with from ten to twenty minutes churning.

A French writer says that to procure butter of an exquisite flavor and extreme delicacy, after washing it with water until the water runs quite clear, you must wash it in new milk.—The cream of the new milk becomes incorporated

with the butter and communicates to it sweetness and delicacy.

When cream is taken from sour milk, or has stood so long as to become sour, add to it when it is to be churned a little new milk just from the cow. The butter will be improved; but not so good after all as that made from fresh cream taken from fresh milk.

SWEET APPLE PUDDING.

Take one pint of scalded milk, a pint of Indian meal, a teaspoonful of salt, and six sweet apples cut in small pieces—should be baked not less than three hours; the apples will afford a rich jelly. This is truly one of the most luxurious, yet simple Yankee puddings made.

CURE FOR BOTS IN HORSES.

If a horse is liable to be affected by bots, a little tobacco, cut fine, or blacksmith's cinders reduced to fine powder and sifted and mixed with his provender, or a little dry ashes mixed with his water and grain, in the fall or winter, early, when the insects are in their young and tender state, would serve to annoy and destroy many of them. After all

Prevention is the best Remedy. And this may certainly be made effectual by carefully examining your horses every two or three weeks, from the beginning of July to the last of September, and with a sharp knife scraping off the eggs of the insects, which may be found deposited, more or less, on most horses, especially those kept at grass or in open, airy stables. They are found mostly about the fore legs and flanks, or under the throat of the horse.

[From the Yankee Farmer.]

ON MANURES, AND THEIR APPLICATION TO THE SOIL.

In my last, I treated of ashes leached and unleached, and showed their operation on different soils according to my own experience of their efficacy. The theory I have deduced is not taken from books or from other observers. Indeed I know I differ from a host of commentators on the virtues of ashes. I have been full and explicit in order to call out opponents, if such there now are, and for one should be pleased to see them and their reasons in print.

Peat ashes differ very materially from wood ashes. They come next to be considered, and with the same freedom from common cant on the subject as was observed in treating of wood ashes. These ashes differ much in quality and in richness, as does the peat whence they come. The peat of some meadows is very solid, and will weigh twice as much as that from others, and is worth twice as much for fuel. The most solid peat contains most bitumen, and when well cured for fuel, resembles, in burning, the bituminous coal. This solid kind of peat does not kindle so easily as that which is apparently more fibrous, but it lasts much longer and probably gives out heat in proportion to its weight, as compared with the light kind, when both are equally dried. And this rule will hold good for all wood for fuel in a dry state. Peat ashes yield little or no lye. They are not used by the soap-boilers. Hence we must not calculate on their operating elsewhere as wood ashes do. Yet they are a very valuable manure.

The English farmer formerly valued them very highly, considering them worth three to one of wood ashes. With us they seem of little value when dropped on a hill of corn planted on green sward. Having no lye in them, they seem not to contribute essentially to the decomposition of matter in the soil, but when applied as a top dressing for grass lands they often have a wonderful effect, while wood ashes applied in the same way and on the same kinds of soil, seem not to mark clearly the boundary of their application. I speak now of light top dressings. These peat ashes bring forward clover surprisingly, when growing on our sandy loams, and strongly remind us of the great stories that were told of the efficacy of plaster sown on certain soils. The mode of their operation is not so clearly understood as that of moist manures. It is quite as difficult to account for their virtues as for those of plaster. Probably in the act of combustion peat acquires certain qualities from the atmosphere that are useful to vegetation, and that the ashes have the power of retaining those qualities until called forth by the action of the rains, the dews and the earth that lie in contact. They may improve the crop for the reason that burnt clay improves it. Burnt loam of any kind is probably very useful to vegetation, and has been much used in England.

As peat ashes have no lye in them, they may be thrown on the heap with stable manure without injury, and be intermixed with it.—But they are very easily sown on grass lands for a top dressing, and as this dressing is not liable to evaporate and waste like most top dressings, and as some lands cannot be ploughed so as to incorporate the manure with the soil, the ashes from peat may be used alone in such cases to the best advantage.

In the progress of paring and burning meadows we usually cut three or four inches deep, and burn the whole thus pared; this gives us a fine coating of ashes, and if evenly spread they will produce a fine growth of grass, which will continue good for several years.

Whether the ashes from peat will produce as great effect as the peat itself would do, has not yet been determined. It is certain they operate more rapidly. If they are found equal to the peat itself, the most economical mode of using peat as a manure will be to first convert it into ashes. Peat applied in its crude state gives no proof of great efficacy the first season. It is probably best not to use it without mixture with other substances.

W. B.

Framingham, Dec. 1838.

MANURE.

What is the Greatest Quantity of Manure to be obtained from Given Means?

MR. EDITOR—There are in agriculture, as perhaps in every science, some leading propositions, calculated in a particular manner to arrest attention by their prominent importance. Such I hold that of the Subscriber, in your May number—“*What will an acre of land produce?*” and also the question which heads this article.

Were it possible at once to afford a complete and palpable solution to those two propositions, what mind can calculate the vast increase of treasures that would instantly become accessible to humanity? As, then, we cannot inquire too strict-

ly, or know too much regarding them, I propose, after recapitulating a few of the principal statements of a “Subscriber,” concerning the latter question, to furnish my own experiments upon the former.

He informs us that a single acre of land, *with abundant manuring and superior cultivation*, was made to produce the sum of \$348 40 per annum, for five successive years, besides the vegetables used in a small family. He further states, in substance, as his present conviction, that the quantity of soil cultivated has nothing to do with the secret of gathering money out of it; that “this altogether depends on a judicious selection of soil, *on the facility of obtaining manure*, and on the proper application of its food for plants,” &c.—that he found, by actual experiment, made upon a large scale, “that the profit of capital laid out in land produced an interest of only five per cent per annum, the capital laid out in manure upon the same land produced *twenty per cent.*”

Now, my own experience, as I shall presently show, abundantly confirms the probable accuracy of all these statements. Let us distinctly understand, then, that it is not the great quantity of land, but the *abundance of manure* upon a little, that is alone required to give wealth and independence; that the man who owns five or six acres, may (according to the above data,) with the aid of manure and good management, draw \$1,800 from them each year, while he of a hundred acres may scarcely obtain half of it upon the common plan.

But where is the requisite manure to be obtained that shall so suddenly and surely enrich the farmer? In reply to this, I will simply give my own experience, and by it endeavor to convince the reflecting farmer what amount can, and in fact *has* been made from means incomparably more limited than is generally imagined possible.

Previous to 1829, I had followed in Philadelphia a sedentary occupation, which by excessive application in it, had so enfeebled my constitution, that I was obliged to seek in the country for that measure of health which I might no longer hope for in the city. So I bought, with my scanty savings, a small place of ten and a half acres, and moved upon it the same fall of 1829.

Not being acquainted with farming, I hired a man to plough two and half acres, and sow it in rye. The cost of seed and labor, in putting in, gathering and thrashing the said crop, was \$8 56. The crop yielded five and a half bushels of very poor black rye, fit only for hay feed—say at forty cents per bushel, (as good rye was then selling at fifty and fifty-six cents per bushel,) was worth \$2 29, and the nett loss sustained upon farming the ground was \$6 36. The season was moderately good for grain, and the two and a half acres rather a favorable specimen of the rest of my land! I planted a potato patch the following spring, (1830,) of about the fourth of an acre, which I manured in the hills with one load of marl only, and the crop yielded but three and a half bushels.

Being a total stranger to the nature and character of soils, but having previously, from some cause, entertained the notion that land in general produced about twenty-five bushels of wheat, or forty bushels of corn; or four or five loads of hay to the acre, the conviction I had now re-

ceived of the absolute worthlessness of my land fell upon me like the shock of a thunder-clap. Discouraged by the greatness of my disappointment, but not quite confounded, I determined that manure, in future, should be every thing to me, and stand in the stead of both land and crop. Being greatly improved in health, by the change of situation and exercise, I plied my vocation with increased diligence for the maintenance of my family, and made it the amusement of my leisure hours and leisure moments to collect from every corner, and pannel of fence, every thing that I imagined could furnish a vegetable nutriment, and placed it in the cow yard, so combined with the litter as to be absorbed and retain every thing of the putrescent character that might be deposited there. By such means I have gone on, every year increasing the quantity of my manure, to an extent that I believe astonished most of my neighbors. The following is a sketch of the means I possessed, and the methods I took to obtain manure for the present year.

I commenced last summer by collecting into the outer part of my hog pen every thing of the weed kind I could find about the place, till I had a layer about twelve inches deep, which I covered with a layer of earth about five inches thick, continuing the process till the pen was filled to about two and a half feet deep. In the fall I littered my loose corn cobs and the principal part of the buckwheat straw into the pen, interspersed with layers of earth in the same manner. The two stalls of my stable I served also the same, taking care to save therein all the chaff and refuse straw after thrashing. In these stalls I poured weekly, through the fall and winter, (for I had no cattle in them except in bad storms,) the soap-suds and such putrescent fluids that might be obtained, keeping the corners and outsides, and under the mangers carefully saturated.

As soon as my corn was gathered in the fall, I cut the stubs close to the ground, and wheeled them immediately, *while yet heavy*, into the barnyard, where I packed them in every part of it, and also under the shed, being an area of ground about forty-feet by twenty, and in a few days covered them also with a layer of earth, from a fence-row, close by, to the depth of about eight or ten inches. Upon this earth I foddered my three cattle during the winter, occasionally depositing more earth upon the litter as collected there.

Your readers will readily judge, that the object of all this preparation was not so much for the sake of saving the materials collected there as to obtain a menstrum, or rather *sponge*, if I may so call it, calculated to absorb and retain all the urine deposited in the yard during the winter. The compost masses, however, or layers, thus collected together, are not to be considered as manure prepared for the soil, but only as *materials* that require to be thoroughly *mixed* in order to reduce them to a state fitten for a rapid and complete incorporation with the soil. Accordingly, with this view, I commenced late in April the operation of turning it, which, from its having become closely packed to the depth of twenty inches, with the stalks at the bottom, could only be done with the aid of the grubbing hoe, turning it in strips about a foot wide, reaching across the yard, and throwing the loosened manure back a suffi-

ent space to allow a trench between, wide enough to work in. After removing the whole cover from the stalks, a strip, as before mentioned, they were easily grubbed up, by first cutting them through all along the solid edge of the strip with the hoe, it being made pretty sharp for the purpose. In addition to this pile of yard manure, I have also emptied the contents of my hog pen and stables, extending the pile several feet, and laying upon the ground when first loosened, more than two and a half feet deep. Of this manure I have used sixteen loads this spring, for truck and garden, and, judging from the size of the pile yet remaining, there cannot be less than sixty loads, which being turned once more, I intend to use for wheat next fall.

In this manner, from only three head of cattle, and the fattening of four hogs, I have made from seventy to eighty-two horse loads of manure, the highly fertilizing properties of which are abundantly attested by my own former experience. I will not say that it is stronger than the best barnyard manure, but from its closer affinity to the nature of the soil, and greater facility for being rapidly combined and incorporated, without loss by evaporation, I have no doubt it will be frequently found, upon trial, more effective and more durable.

In the process of turning manures, thus prepared, I hold it of the highest importance to mix well the earthy and vegetable parts together. Few are perhaps aware how rapidly the earth facilitates vegetable decomposition, and to what a surprising degree it absorbs the excess of fertilizing-effluvia, which must otherwise be evaporated during the process of decomposition. This circumstance, I believe, taken in connexion with the careful economising of all animal excretions, constitutes chiefly the great secret (I might, perhaps, add *alleged* necromancy,) that has added already so much verdure to my previously exhausted soil, and been so profitable to me, and so surprising to my neighbors.

No farmer can imagine, that has not tried the experiment, what a prodigious quantity of rich, vegetable, and fibrous earth may be collected from corners and by-places which lie out of the way of cultivation, and which from their retired position, have perhaps, never so much as attracted his notice. All such refuse trash, and fibrous earths and weeds, by being conveyed to his barnyard, at intervals, during the fall and winter, and judiciously combined with its contents, will be converted into a rich, fertilizing, and durable matter, merely by absorbing and retaining that excess of putrescent fluids and effluvia which is otherwise lost by filtration and evaporation; that is, by soaking away and drying up.—*Farmer's Cabinet.*

W. H.

Pittstown, Salem Co. N. J. May 20th, 1838.

VOMITING IN CATTLE.

We have condensed the following article from a paper in the London Veterinarian, a work as its name implies devoted to Horses and Cattle, and treating most subjects with great ability and success. The disease alluded to here is not a very common one, but we have known instances of it, and valuable animals are doubtless lost every year from this cause, and not understanding the

proper treatment. The paper is from the pen of M. Sautin, a veterinarian of celebrity.

Mr. S. was sent for to see an ox which had vomited almost continually for fifteen days, and by directions of an empiric had been drenched with doses of oil, such as linseed, walnut and olive oils, but without any beneficial effect. The eyes of the ox at this time were deeply sunk in its head, the pulse feeble and the walk staggering. He eat with greediness, and masticated well, but after he had eaten a certain quantity, he become uneasy, the muscles of his belly contracted, he stretched out his neck, the food began to ascend the gullet, it filled his mouth and then fell to the ground. This continued till he got rid of all he had eaten; and then he would begin to eat anew. It was the same with liquids except that they were ejected with more force. Proper rumination, or chewing the cud, was altogether suspended, and the ox was so rapidly wasting away that its speedy death was feared.

The cure consisted of an infusion of mint, an ounce of camphor, suspended in a sufficient quantity of vinegar being added to every two bottles of the infusion. This dose was not ejected from the stomach. Three hours after a little hay was given, and was retained. Some water whitened with rye meal was also drank, and soon began to ruminate the food he had taken. The next morning the drink was repeated, and after two hours rather more hay than before, with some of the rye and meal water, and he again began to ruminate. The farmer now, contrary to orders, gave him too large a quantity of food, and the disorder returned; but was checked at once by more of the infusion. On the third day another drink was given, and he was allowed a fair quantity of food. It was retained, the sickness did not return, and the animal rapidly recovered its health and condition.

In the second case, a cow that had been employed in drawing wood, when released from the yoke began to vomit, and she ejected a prodigious quantity of food. Her belly was greatly contracted and her flanks fallen in; her left ear hung down as if it was paralysed, and she was also blind on the same side. The upper eyelid was relaxed and engorged, but the eye itself appeared healthy, and clear. She ate voraciously, but ejected it as soon as swallowed. Three pints of an infusion of peppermint, with six drachms of camphor dissolved in vinegar, were given and retained. Food was almost immediately returned. After three drinks had been given, the stomach retained hay, and she ruminated. The next day she vomited a little after eating, but another drink checked it, and after a few hours more food was given her. She was sick no more. Her ear soon resumed its natural position, and her eye its perfect sensibility to sight. During the disease, the incisor teeth became black and loose, but in a short time regained their natural whiteness. Mr. S. was of the opinion that this effect on the teeth was caused by the acid fluid ejected from the stomach. Another case, almost the same as this, was terminated by similar treatment in the same way.

Other cases are given, in which this mode of treatment in curing vomiting was successful, though some were quite obstinate, and required a course of mint infusions for several days before

food in any considerable quantity would be retained on the stomach. Fortunately this disease is a rare one, but whenever it occurs it is a serious one. We would here ask whether in case of blown cattle, which frequently occur, peppermint infusion with camphor has been tried? The remedy to us would seem likely to have an excellent effect; at any rate we should think it deserving of trial.—*Gen. Farmer.*

Young Cattle.—Young's Farmers' Calendar, under January, contains the following observations. "Last year's calves should now be fed with hay and roots, either turneps, carrots or potatoes; and they should be thoroughly well fed, and kept perfectly clean by means of litter; at this age it is a matter of great consequence to keep such young cattle as well as possible, for the country practice will inevitably stop their growth, which cannot be recovered by the best summer food. If hay is not to be had, good straw must be substituted; but then the roots should be given in greater plenty and with more attention. To Steers and Heifers two years old, the proper food is hay, if cheap; or straw, with baits of turneps, cabbages, &c. It is not right to keep yearling calves, and two year old together, because in general the younger cattle are, the better they should be fed."

Rice Crop.—We have been informed by several planters, who have been at some trouble to inform themselves, that the present crop of Rice is two-fifths less than a fair average crop.

More than one half of the product of the last harvest has been already threshed, so that there can be little difficulty in arriving at a correct estimate of amount and the value.—*Wilmington (N. C.) Adv.*

[From the Yankee Farmer]

The progress of improvement in husbandry will be graduated in a measure by the degree of intelligence which directs its labors. "It appears to be strange—and yet we see it to be true," says the Rev. C. Young, "that the more ignorant a man is, the more obstinately is he wedded to his own notions and ways, the more ready to scoff at and oppose every thing that is new. Self-conceit and prejudice are the legitimate offspring of ignorance, and in proportion to the degree of ignorance, in a community, will be the hostility to improvement, and the derision, and even persecution, at which all attempts at innovation will be met. The spirit of improvement is thus cowed and even smothered. And if occasionally a bold genius struggles into life and exhibits his inventive powers, he hazards his peace and sometimes his life."

When Hargrave, less than a century ago, attempted to introduce the spinning-jenny, which he had invented, into the cotton manufacture, he was obliged to fly from Lancashire, in England, where he lived, at the risk of his life.—The first saw-mill ever erected in England, was destroyed by a mob, because they thought it would take bread from the families of the sawyers.

Fortunately, in our day and country, acts of violence towards innovators upon old modes of farming, are not to be apprehended. We can only complain of a listless indifference to improvement, and of a conceited ignorance, which rejects the useful, because it is new.

CURE FOR RHEUMATISM.

A correspondent of the Pittsburg Gazette, who describes himself as a medical practitioner, of twenty years standing, furnishes the following highly valuable, if well founded, information:

At the age of about seventeen, I was first attacked with the Inflammatory Rheumatism, when after the prompt use of the lancet, cathartics, blisters, and diaphoretics, I was restored. From that period until about twenty years ago, I had six or seven similar attacks, generally requiring venesection, purgation, blisters, and diaphoretics, before I could recover. In these attacks my extremities would be so inflamed that I could scarcely bear to be touched. About the year 1818, I had suggested to me the use of cotton instead of the woollen, which I had worn next to the skin in the form of shirt and drawers. I immediately conformed to the suggestion, abandoned the woollen, have ever since worn the cotton, and now for about twenty years have never been confined one day by the rheumatism.

My observations also in an extensive practice, have furnished unequivocal confirmation of the facts, that woollen worn next the skin is utterly incompatible with a rheumatism constitution, and that cotton is most decidedly advantageous. A lady whom I attended during a severe attack of rheumatism found while in a state of convalescence that her fingers were becoming rigidly contracted. I recommended to her the use of cotton, and now for many years she has been free from the complaint. Having had occasion, while pursuing my professional avocation in Philadelphia, to protect my hands when driving my gig against the cold, that would have rendered them both unpleasant to myself and unsuited to the wrists of a patient, I procured the fur lined gloves, but these I could not endure by reason of returning rheumatism, and had my gloves lined with cotton flannel.

As to the therapeutic principles, on which to account for the salutary effect of the cotton dress, we are perhaps not prepared to give the entire rationale; but one circumstance deserves particular notice. When woollen is worn next the skin, the perspiration not being absorbed by the flannel becomes inspissated, and of course obstructs both sensible and insensible perspiration.—*Saturday Courier.*

Salvus populi.—A very simple expedient will protect the inhabitants of regions exposed to bilious affections, such as intermittent and remittent fevers, from these desolating scourges. A cold infusion of the common dogwood (*cornus florida*) taken morning, noon and night, say a teacup-full of it at a time, will, in most cases, be found an effectual preventive. Chemical analysis has revealed in the dogwood a principle similar in nature and qualities to the quinine, though, perhaps, not so energetic. The writer of this communication had occasion once to employ the infusion of the dogwood in an obscure part of the country, where the quinine was rare, and too costly for the poor; he found it to answer the purpose admirably. The light precaution, if adopted by families and their servants, might protect them from much suffering and exposure.—*Alexandria Gazette.*

DURHAM AND OTHER STOCK FOR SALE.

The subscriber offers for sale the following truly valuable stock, at the prices affixed to each animal. Applications to be made to him at his residence in Philadelphia, Pa. or to the Editor of the Farmer and Gardener, Baltimore, Md.

No. 1. Defiance 2d, red and white bull calf, one year old last June, a perfect model of an animal in every particular—took the premium at the agricultural fair, Philadelphia, 10th Nov. last, for being the best yearling on the ground. Defiance's dam, the celebrated deep milking cow York Belle, g. d. Martha, by Wye Comet; g. g. d. imported Laura, sire Defiance 1st, dam Ruby 2d, g. d. Ruby 1st, sent to Col. Powell by Mr. Whitaker, sire Bertram 2d. Defiance 1st was purchased at Col. Powell's sale 23d April, 1836, then a calf—cost \$270; considered the best calf sold on the day of sale. Price for Defiance 2d, \$300—he is the best calf I have ever seen of his age.

No. 2. Bull Hector, roan, calved Aug. 20, 1836, two years old past, dam Daphne, bought at Col. Powell's sale April 23d, 1836, then a heifer in calf by it, was sold, *Bertram* 2d; he is a very fine bull for his age, and well formed, with very good points—see *Herd Book*.—Dam's pedigree: a roan, bred by Chas. Barnitz, esq. by Emperor, g. d. Coquette, bred by Col. Powell, g. g. d. Fairy, g. g. d. Prize, g. g. d. Buckingham—price for Hector \$150.

No. 3. Cow York Belle, yellow roan, full bred Durham Cow, 5 years old, dam Martha, bred by Col. Powell by Wye Comet, g. d. imported Laura; sire of York Belle was Mr. Barnitz' splendid bull Emperor. York Belle was purchased at Col. Powell's sale, 23d April, 1836, then a heifer; now in calf by Defiance 1st; bulled June 15, 1838. Price \$250.

No. 4. Vermilion, brindle heifer, 2 years old, dam Lady Delight, the famous butter cow, formerly owned by Col. Powell; Lady Delight produced 19 pounds of butter in one week; sire, a full bred bull kept near R. T. Potts, esq.'s farm in Montgomery county, bulled by Defiance 1st, 10th May, 1838—price \$200.

No. 5. Bright Eyes, red roan heifer, calved 25th of March, 1838, dam Daphne, by Emperor, g. d. Daphne 1st, g. g. d. Coquette, g. g. d. Fairy, g. g. d. Prize, g. g. d. Buckhorn, sire Defiance 1st—price \$200.

No. 6. May Flower, red and white heifer, calved 1st May, 1838, dam York Belle, g. d. Martha, by Wye Comet, g. g. d. imported Laura, sire Defiance 1st—price \$225.

No. 7. Red Cow, first rate butter cow, said to be full bred, purchased from New York—price \$100.

4 Bakewell Rams, price \$100, \$50, \$30. Each very superior sheep.

Also a first rate milch Cow of the Sims, breed, large black and white pied, 5 years old, in calf by Defiance 1st—price \$100.

The above stock was much admired at our agricultural Fair; they are in fine condition, not over and above loaded with fat, but in fine healthy condition—they are truly worth the attention of some spirited agriculturist.

JOHN BARNEY,
Philadelphia.
Jan 15 3t

BARHAMVILLE INSTITUTE, With 10,000 *Morus Multicaulis* Trees, for sale.

The establishment now offered for sale, is called Barhamville. It is beautifully and eligibly situated about 2 miles from Columbia, (the capital of S. C.) in a region of country termed the Sand-Hills. The grounds comprehend between 500 and 600 acres; they are well timbered, (chiefly pine and small oak); about one half consist of what is termed bottoms, rendered perfectly dry and tillable, by at least 6000 yards of ditching, most of which measures 5 feet in width by 3½ in depth. There are upwards of 70 acres completely ditched, now ready for being broken up, which I value at \$50 per acre.

The Institute buildings are situated upon a high range of Sand-Hills, proverbial for health, inasmuch that the neighborhood affords a retreat for many of the families of Columbia during the summer months. It was on that account that the site was selected for the business (a female Boarding School) to which the buildings have been dedicated. The water is excellent, supplied by two pumps—besides which there are two excellent springs.

The centre building is of wood, well plastered, and neatly finished throughout, and measures 54 feet square, three stories high; the upper room or attic story being 15 feet in height. Beneath this building is an excellent cel-

lar, above ground. The wings attached to the centre building are 100 feet each in length, the one 24 and the other 34 feet in width. The southern wing is of brick, well plastered, two stories high, well finished throughout, having an excellent cellar above ground. The northern wing, recently built, is of wood, ceiled throughout. It is three stories high, with an attic story equal in its area and superior in its height to the three lower stories. The basement story of this wing is of brick.

A mahogany spiral stair-case of superior workmanship, which with other improvements attached, cost upwards of \$2500, ascends throughout the centre building.

From the extremity of the brick wing, and at a right angle with it, proceeds a building, (the academic edifice) 134 feet in length by 34 feet in width, two stories high, well ceiled throughout, and having an excellent cellar above ground.

Besides fire-places, the whole establishment, with the exception of the brick building, is warmed by air furnaces, on the most improved plan, similar to that by which Grace Church and many public and private edifices in Philadelphia are warmed.

The expense of erecting the apparatus, &c. amounted to upwards of \$2500.

The area of all the floors in these buildings, is, by measurement, upwards of 100,000 square feet. On the Institute buildings is an insurance for \$15,000.

There are also, at a small remove from the main buildings, two residences, cottage-built, neatly finished; the one containing 4, and the other, 2 rooms.

Within 300 yards of the Institute, on an eminence, is the mansion built by me for the late John La Taste, repurchased by me from his family. This is a highly improved residence. The house stands upon brick pillars about 5 1-2 feet from the ground; the four lower and two upper rooms being well finished; out-houses, &c. in good order.

It is unnecessary to say, that the out-buildings of the institute are, in every respect, correspondent to the main building. The garden has been improved at a considerable expense.

With the above establishment, every way fitted for an extensive Silk Factory, may be had 10,000 *Morus Multicaulis* trees, 500 of which are 6 years old, all of vigorous growth, which, at the present time, will yield upwards of 200,000 cuttings; they are now regularly planted, 12 feet by 12. 100,000 cuttings, of two and three eyes each, are now being set out, well secured from frost by a ground dressing of long manure.

When the intrinsic value and resources of the above establishment are taken into consideration, and when it is recollected that in one year, from the present time, Columbia will be connected with Charleston by a rail-road, now in a vigorous state of progression; when it is, furthermore, recollected, that this rail road is to connect the sea-board with the great north-west, it may be said that the property now offered for sale, presents inducements to individuals or companies, desirous of embarking extensively in the Silk business, unsurpassed by any thing offered in this country.

The buildings, collectively, cost upwards of \$60,000, and the lands, with the improvements bestowed upon them, will command at auction \$25 per acre, and, as it respects the value of the trees, an estimate can be easily made by reference to the prices they are now commanding in the Northern and Middle States.

I will sell the above at two-thirds of the original cost, on the following terms: one-third cash, and the remaining two-thirds payable in one and two years, with interest from time of sale, mortgage and approved security and policy of insurance assigned.

ELIAS MARKS, M. D.

Barhamville, near Columbia, S. C.

I will dispose of 100,000 cuttings (or 200,000 eyes) each cutting to consist of 2 or 3 eyes, hermetically sealed at each end with a composition of beeswax and rosin. Price 2½ cts. per eye, delivered in Columbia.
E. M.
de 18 6t

THE MARYLAND SILK COMPANY OF BATIMORE

Offers for sale 25,000 genuine *Morus Multicaulis* trees, 20,000 *Alpin*, *Canton*, and other varieties.
d 25 L. J. COX, President.

SPRING CLOVER SEED,

Just received and for sale, by
R. SINCLAIR, Jr. & CO.

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every Monday

	PER	FROM	TO
BEANS, white field,.....	bushel.	1 25	
CATTLE, on the hoof,	100lbs	7 50	9 50
CORN, yellow.....	bushel	90	95
White.....	"	90	95
COTTON, Virginia,.....	pound	14	15
North Carolina,.....	"	13 1/2	14 1/2
Upland,.....	"	11 1/2	15
Louisiana——Alabama	"	15	16
FEATHERS,.....	pound.	55	
FLAXSEED,.....	bushel.	1 69	1 75
FLOUR & MEAL—Best wh. wh't fam.	barrel.	10 00	10 50
Do. do. baker's.....	"		
Super How. st. from stores	"	8 12	8 25
" " wagon price,	"	7 75	7 75
City Mills, super.....	"	8 12	8 25
" extra	"	8 50	
Susquehanna,.....	"		
Rye,.....	"	5 50	
Kiln-dried Meal, in hhd.	hhd.	19 00	
do. in bbls.	bbl.	4 00	
GRASS SEEDS, wholes. red Clover,	bushel.	14 00	16 00
Kentucky blue	"		
Timothy (herds of the north)	"	3 00	
Orchard,.....	"	2 00	2 50
Tall meadow Oat,.....	"		3 00
Herds, or red top,.....	"	90	1 00
HAY, in bulk,.....	ton.	12 00	16 00
HEMP, country, dew rotted,.....	pound.	6	7
" water rotted,.....	"	7	
Hogs, on the hoof,.....	100lb.	9 00	
Slaughtered,.....	"	8 00	8 50
Mops—first sort,.....	pound.	20	
second,.....	"	18	
refuse,.....	"		
LIME,.....	bushel.	32	33
MUSTARD SEED, Domestic,—; blk.	"	3 50	4 00
OATS,.....	"	50	53
PEAS, red eye,.....	bushel.		1 12
Black eye,.....	"	1 00	1 12
Lady,.....	"		
PLASTER PARIS, in the stone, cargo,	ton.	4 37	
Ground,.....	barrel.	1 50	
PALMA CHRISTA BEAN,.....	bushel.		
RAGS,.....	pound.	8	4
RYE,.....	bushel.	88	95
Susquehanna,	"		none
TOBACCO, crop, common,.....	100lbs	5 00	5 50
" brown and red,...	"	6 00	6 50
" fine red,.....	"	9 00	12 00
" wraperry, suitable	"		
for segars,.....	"	10 00	20 00
" yellow and red,...	"	10 00	14 00
" good yellow,.....	"	10 00	15 00
" fine yellow,.....	"	12 00	15 00
Seconds, as in quality, ..	"	6 00	
" ground leaf,...	"	7 00	9 00
Virginia,.....	"	6 00	10 00
Rappahannock,.....	"		
Kentucky,.....	"	6 00	8 00
WHEAT, white,.....	bushel.		
Red, best.....	"	1 84	
Maryland	"	1 84	
WHISKEY, 1st pf. in bbls.....	gallon.	44	45
" in hhd.....	"	41	
" wagon price,.....	bbls		41
WAGON FREIGHTS, to Pittsburgh,...	100lbs	2 00	
To Wheeling,.....	"	2 25	
WOOL, Prime & Saxon Fleeces,...	pound.	50 to 55	
Full Merino,.....	"	45 50	
Three fourths Merino,.....	"	40 45	
One half do.....	"	35 40	
Common & one fourth Meri.	"	35 40	
Pulled,.....	"	30 33	
POTATOES, 60 to 70 cts. a bushel.			

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,.....	barrel.		
BACON, ham, new, Balt. cured....	pound.	15	
Shoulders,.... do.....	"	13	
Hiddlings,.... do.....	"	12	
Assorted, country,.....	"	12	
BUTTER, printed, in lbs. & half lbs.	"	31	50
Roll,.....	"	25	31 1/2
CIDER,.....	barrel.	1 75	2 00
CALVES, three to six weeks old....	each.	5 00	6 00
COWS, new milch,.....	"	25 00	40 00
Dry,.....	"	12 00	15 00
CORN MEAL, for family use,.....	100lbs.	2 00	2 12
CHOP RYE,.....	"		1 60
EGGS,.....	dozen.	37 1/2	50
FISH, Shad, No. 1, Susquehanna,	barrel.	9 75	10 00
No. 2,.....	"	9 25	
Herrings, salted, No. 1,.....	"	6 00	6 25
Mackerel, No. 1, —...—No. 2	"	11 00	13 50
No. 3,.....	"	7 25	
Cod, salted,.....	cwt.	3 25	3 37
LARD,.....	pound.	13	13 1/2

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

		VIRGINIA.
U. S. Bank,.....par		Farmers Bank of Virgi. par
Branch at Baltimore,....do		Bank of Virginia,.....do
Other Branches,.....do		Branch at Fredericksburg,do
		MARYLAND.
Banks in Baltimore,....par		Petersburg,.....do
Hagerstown,.....o		Norfolk,.....do
Frederick,.....do		Winchester,.....do
Westminster,.....do		Lynchburg,.....do
Farmers' Bank of Mary'd, do		Danville,.....do
Do. payable at Easton,....do		Bank of Valley, Winch. par
Salisbury,.... 1 per ct. dis.		Branch at Romney,.... par
Cumberland,.....par		Do. Charlestown, par
Millington,.....do		Do. Leesburg,.... par
		DISTRICT.
Washington,.....		Wheeling Banks,.... 2 1/2
Georgetown, } Banks, 1/2 p.c.		Ohio Banks, generally 3
Alexandria, }		New Jersey Banks gen. 3
		PENNSYLVANIA.
Philadelphia,.....par		New York City,....par
Chambersburg,..... 1/2		New York State,....do 1/2
Gettysburg,.....do		Massachusetts,.... 1 1/2
Pittsburg,..... 2 1/2		Connecticut,.... 1 1/2
York,..... 1/2		New Hampshire,.... 1 1/2
Other Pennsylvania Bks. 2		Maine,..... 1 1/2
Delaware [under \$5].... 4		Rhode Island,.... 1 1/2
Do. [over \$5]..... 1 1/2		North Carolina,.... 3 1/2
Michigan Banks,..... 10		South Carolina,.... 4 1/2
Canadian do..... 10		Georgia,..... 5 1/2
		New Orleans,..... 7 1/2



Wm. Prince & Sons will make sales of Trees and Cuttings of the Genuine Chinese Morus Multicaulis, Morus Expansa, Alpine, Broussa, Canton, and other varieties, deliverable to the purchasers at such period in the Spring, as is convenient to them, and will enter into contracts accordingly. Prices and terms for the trees and cuttings will be forwarded to all who may apply for them by mail, as well as prices of silk worm eggs, mulberry seeds, &c. The Multicaulis trees are remarkably vigorous, and as we first imported the genuine tree, purchasers are sure of obtaining the true kind. It is from this cause, and from the great attention aid by them, that the trees they have sold have given universal satisfaction.

Flushing, near New York—Jan. 1. Im

SILK AGENCY,

Corner of E. and 7th streets, Washington City, D. C. The subscriber having commenced an Agency for the purchase and sale of SILK MULBERRY TREES, and all articles connected with the growing of Silk, offers for sale the following varieties of Mulberry Trees at Baltimore prices, viz. Multicaulis, Alpine, Broussa, White Italian and Canton; also Mammoth White Silk Worm's Eggs, warranted to be of superior quality. All the recent publications on silk growing for sale, and subscriptions received for the various periodicals devoted to that subject.

no 20

J. F. CALLAN.

CHINESE MULBERRY TREES.

American Silk Agency, No. 95, Walnut st. Philadelphia The subscriber having opened a permanent Agency for the purchase and sale of all articles connected with the culture and manufacture of Silk in the United States, offers for sale all the different varieties of MULBERRY TREES, suitable for raising the SILK WORM; viz: Morus Multicaulis Alpinese, Brussa Multicaulis Seedlings. Morus Expansa, Multicaulis Cuttings, Improved Italian Trees, &c. Also, Cuttings from Norton's Virginia Seedlings, and Cunningham's Prince Edward GRAPE VINES. These vines produce an abundant crop of fruit, warranted not to rot or mildew and are fine for the table, and capable of yielding the finest wines.

S. C. CLEVELAND, Agent.

SPLENDID BLOODED STOCK FOR SALE.

The proprietor of Covington farm will dispose of the following fine bulls on reasonable terms, viz.

One bull two and a half years old.

One do. six months old.

of the improved Durham short horn breed; the dam of the first was got by the celebrated bull Bolivar; for size, form and beauty they are not surpassed by any animal in the state.

Three Devon Bulls, one of which is seven years old next spring, and the largest Devon in the State. The Devons are from the stock of the late Wm. Patterson, and of undoubted purity.

Two half Devon bulls.

Two bulls half improved Durham short horn, and half Devon.

One splendid bull, a cross of the Bakewell, Alderney and Devon.

One bull, half Alderney and half Holstein.

These fine animals may be seen at Covington farm, near Petersville, Frederick county, Md. on application to James L. Hawkins, Baltimore, or to

se 11 f FREDERICK FERT. Manager.

FOR SALE,

A valuable FARM of prime soil, on the Western Run in Baltimore county, about two miles north west of the 14th mile stone of the Baltimore and York turnpike road, and at the same distance from the depot of the Baltimore and Susquehanna rail road, at Cockey's tavern, in a rich, highly cultivated and healthy tract of country.

This farm contains from 260 to 270 acres, having a full proportion in wood, much of which is building timber, peculiarly valuable in that neighborhood; is in the best state of cultivation; a considerable part in productive timothy meadow, and the residue of the arable land, not in grain, is well set in clover, the whole under good fencing, laid off into convenient fields, each of which is well watered. The farm has a large quarry of excellent building stone. There are on the premises an apple orchard of select fruit trees, which seldom fail to bear abundantly; a valuable mill seat on the Western Run, with a race already dug. There is no location in the country more favorable for a grist mill, having the advantage of a rich and thickly settled neighborhood, and a good public road leading thence to the turnpike road. Buildings substantial and convenient, being a STONE DWELLING, and kitchen of two stories; a large stone Swiss barn, with cedar roof and extensive stabling below; large hay house and stable for cattle; stone milk house near the dwelling, with a spring of fine never failing water, with other out-houses. On the country road near the mill-seat a good house and shop for a mechanic, under rent to a good tenant. It is well known the lands on the Western Run are in every respect equal, if not superior to any in the county. Adjoining or near are the lands of Col. N. Bosley, Daniel Bosley, Thos. Matthews and others. The water power, with about 20 acres of land, is so situated that they may be detached and sold separately, without injury to the rest of the farm for agricultural purposes. Terms of sale will be liberal. Apply to

NATHANIEL CHILDS,

on the premises, or to

WILLIAM J. WARD,

oc 23 tf Fayette, near Calvert st. Baltimore.

ROBERTS' SILK MANUAL.

Price per single copy, 37 1/2 cts.—to dealers who take 100 copies or more, a deduction of 33 1/3 per cent. discount will be made; to those who take a less number, 20 per ct. will be allowed—terms, cash.—It contains 100 large octavo pages.

THE AMERICAN FARMER.

The proprietors of this paper have a few complete sets of this work on hand, which they will dispose of at the reduced price of \$50 a set.

oct. 18

3

THE FARMER & GARDENER

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, E. P. ROBERTS AND SAMUEL SANDS—EDITED BY E. P. ROBERTS.

No. 39. BALTIMORE, MD. JAN. 22, 1839. Vol. V.

THIS publication is the successor of the late **AMERICAN FARMER** and is published at the office, at the N. W. corner of Baltimore and North streets, over the Patriot office, at two DOLLARS AND FIFTY CENTS per annum, if paid within one month from the time of subscribing, or \$3 if after that time. All letters to be post paid.

BALTIMORE: TUESDAY, JAN. 22, 1839.

We comply with the urgent request of "A Subscriber," by republishing to-day certain articles which appeared editorially in our paper of the 8th inst. and respectfully refer such of our readers as may not have read them, to the latter pages of this day's sheet.

As we have hitherto done, we shall continue to lay before our readers every thing within our reach of importance to the *Silk Culture*, believing that in so doing we shall subserve the best interests of our common country.

SUGAR FROM BEETS.

We have inserted in our journal to-day a highly interesting memoir addressed by Mr. Fleischman, a clerk in the patent office, to Congress, upon the introduction, rise, and progress of the manufacture of sugar from beets in Europe. We considered the memoir too important to divide, and have, therefore, given the whole in this paper, and judging from the pleasure and instruction which we derived from its perusal, we are confident our readers will thank us for giving it entire.

To Mr. Ellsworth, the Commissioner of the patent office, by whom it was transmitted to us, we return our sincere acknowledgements, and seize this occasion to say, that the agricultural community are deeply indebted to him for his untiring exertions to promote their interests and advance the cause of husbandry.

THE HESSIAN FLY.

Our readers will recollect that upwards of two years since we published a paper from the pen of Dr. Jefferson Shields upon the Hessian fly, and that in that communication, the reader was induced to conclude, that the Dr. intended to favor the public with a pamphlet upon the subject. Since that period, though often reminded of the inferential promise of the Dr., we have heard nothing from him upon the subject, until a few days since,

when a friend placed in our hands the following memorandum, which we give to our readers, knowing that a deep interest is felt upon every thing connected with this destructive insect :

"Dr. Jefferson Shields states that the Hessian fly commences the deposite of the egg on the 25th of April to the 5th of May ;
2d. From 20th June to the 5th of July ;
3d. 20th Sept. to the 10th of October—1-10 remain in a chrysalis state to the next generation (—one tenth) they deposite only in the stalks of wheat, barley and speltz.

The October deposite of eggs by the Hessian fly, is made just above the first joint, which frequently will be one and a half inches under the ground. The April deposite is made at the first joint just above the ground ; the June and July deposites are made next the top joint, in the under wheat that shoots up in June : in this under wheat, the insect is preserved, until September and October wheat has made its appearance above ground.

Copy from a piece furnished me by Dr. Shields in his own hand-writing."

The Kentuckians deserve every possible success in their efforts to improve the breeds of domestic animals ; for there are no men in this country more liberal in rewarding enterprise. As an instance we would mention that the services of Berkshire boars are charged there at \$10, and we have no doubt, from the laudable spirit prevailing in that quarter, that full employment will be found for every one which may be placed in the delicate position of a solicitor in the court of love.

RECIPE—A sure cure for sore throat—A gentleman of this place has handed us the following recipe, in the efficacy of which he expresses the greatest confidence, if it be applied in time :

Beeswax, 1 ounce : rosin or turpentine from the pine, 1 ounce : hogs lard 2 ounces ; stew them together until dissolved, and after cooling them a little add one-half of an ounce of gum camphor and one table-spoon full of the flour of sulphur, and stir them well together—spread it on a linen cloth, large enough to cover the breast, with a hole in the middle, and apply it to the breast warm, occasionally removing, warming and renewing the application. Care should be taken to keep the breast well drawn.—*Lynchburg Virgin.*

The editor of the *Farmer and Gardener* will add, that the very best remedy he has ever tried in his family for a cough or cold, is a decoction of the leaves of the pine tree sweetened with loaf sugar, to be drank warm freely when going to bed at night, and cold through the day.

Silk.—On the 2d of April last, a law was passed by the Legislature for the encouragement of the culture and manufacture of silk, which provided that the premium should be paid by the State of 20 cents for every pound of cocoons raised, and 50 cents for every pound of silk reeled. We are pleased to learn that under the provisions of this law, Miss *Gertrude Rapp*, of the *Economy Society*, in this county, has recently drawn from the treasury the sum of three hundred and sixty-seven dollars. Beaver county is certainly going ahead in this business.—*Beaver Argus.*

Never was money more wisely expended by a state—never did a lady more richly deserve the gratitude of her country.—*Editor Farmer and Gardener.*

Morus Multicaulis.—The New York Journal of Commerce says :—"The trees which bear this learned name, continue to be great favorites. At an auction sale to-day they brought 37½ cents each, about five feet long, and with all the precious buds trimmed off."

TOBACCO.

The following information may prove of service to some of our subscribers, both here and in the West, as it contains the latest information respecting the stocks of this staple in the great marts in Europe, no accounts of which we believe has yet been published in this country.—*Philad. Com. List.*

From our Correspondent.			
Stocks of Tobacco in first hands Dec. 1st.			
IN ROTTENDAM—			
Maryland and Ohio,	hhds. 2,874	1837	1838
Virginia,	do 1,118		134
Kentucky,	do 43		
Stems,	do 1,063		
IN AMSTERDAM—			
Maryland and Ohio,	hhds. 2,632	957	
Virginia,	do		
Kentucky,	do		
IN BREMEN—			
Maryland and Ohio,	hhds. 4,800	1,606	
Virginia,	do 273	178	
Kentucky,	do 530	193	
Stems,	do 1,750	337	
IN ANTWERP—Nov. 30th.			
Maryland,	hhds. 219		
Virginia,	do 852		
Kentucky,	do 391	71	
IN LONDON, on the 1st December, 1838, the stock was 11,200 hhds.; against 14,860 in 1837, and 22,000 in 1836.			
IN LIVERPOOL, on the 1st December, the stock was 5,465 hhds. Import thus far in 1838, 8,000 hhds.			

There were exported from Boston during the year 1835, 2,948,834 pounds refined sugar.

THE SILK CULTURE.

We hail among the proceedings of the House of Delegates on Saturday last, one of the best signs we have seen. Mr. Witcher, laid before them an interesting and characteristic Memorial of Morris Pollok, a rich and interesting Silk Throwster of Glasgow. He is prosecuting the business with as much skill and success perhaps as any Silk manufacturer in Scotland. His annual outlay is about \$150,000—and he proposes, in consequence of the genial climate and inviting prospects of Virginia, to lay the foundation of a large establishment in Pittsylvania county—to cultivate the Mulberry, to manufacture silk—and instruct our Farmers by actual experiments how they may carry on the business, and turn their otherwise useless hands into productive labor. The aged and the very young may be employed in gathering leaves and tending the ingenious insect.—We confess, there is something in this application, which inspires us with a hope we never had indulged before.—We hail it as one of the most cheering signs of the rising prospect of the silk culture of Virginia.

Several parts of this State have already been doing a little in this line. In addition to the specimens we had previously received, we have before us some fine and beautiful silk thread from a lady in Rockingham county, made from the common black Mulberry. We invite others to make similar contributions; and if it be desirable, we will give not only the places, but names to the Public. We observe in the last Savannah Georgian, "that Mr. Olmsted, a gentleman who has for some time past devoted much attention to the culture of the *Morus Multicaulis*, has arrive there from the North, on his way to Florida. The object of his visit to the South is, to promote the culture of the Mulberry, and the production and manufacture of silk.—He will exhibit some specimens of silk at the library room, and give any information on the subject in his possession to those interested in the subject. His specimens which we have seen are beautiful, and will repay the visiter."

We have on hand a short, but beautiful and instructive Memoir on the raising of silk, which was intended as a *New Year's Gift* to the Citizens of Virginia. We shall take pleasure in laying it before our readers in the course of the week.—*Richmond Enquirer.*

MEMOIR TO CONGRESS ON THE BEET CULTURE.

To the honorable the Senate and House of Representatives of the United States of America in Congress assembled :

The memorial of Charles Lewis Fleischmann, a naturalized citizen of the United States,
RESPECTFULLY REPRESENTS :

The existence of crystallizable sugar in the beet-root was discovered by the German chemist Markgraf, in the year 1747. He communicated the results of his experiments to the Royal Academy of Sciences at Berlin; pointed out the importance which his discovery would have on agriculture and industry, and endeavored to bring it into practice; but at that time, the price of sugar being moderate, chemistry not advanced to modify the complicated operations, and the spirit

of enterprise not sufficiently awakened to make it an object of speculation, the discovery remained without being put into practical use until the year 1796, (forty-nine years afterwards,) when Achard, another Prussian chemist, repeated the experiments of Markgraf, modified them, and erected the first manufactory at Kunnern, in Germany.

The results of Achard's manipulation created great sensation all over Europe, particularly in France, where the chemists re-examined the process of Achard, simplified it, and made it more practicable and profitable in its results.

These simplified manipulations were adopted by enthusiastic speculators, full of sanguine expectations, peculiar to the French character; but the results were not satisfactory, as the immensely large and costly manufactories were partly established in places where the soil was not sufficiently productive, where fuel was scarce and high, the market distant, and the operations directed by men who had not the least idea of agriculture—a science necessarily connected with the manufacture of the beet-sugar—nor practical knowledge of an entirely new process, and a most imperfect apparatus. The consequence of these obstacles was a complete failure, which induced the opinion over the whole world, that the extraction of sugar from the beet, though correct in theory, was impracticable on a large scale.

This, however, was not the opinion of enlightened men; they saw the causes of failure in their true light, and endeavored to overcome and to correct them. The political events of 1812 accelerated the development of this new branch of industry; the French Government, in want of a substitute for the colonial sugar, encouraged the manufacture of the beet-sugar, by establishing four large manufactories, and teaching the best method of extraction.

In 1814, these manufactories were in full operation and flourishing, when the peace of Europe allowed the importation of the colonial sugar into France, causing a destructive shock to the manufacturers of indigenous sugar, which none but immense fortunes could endure, and created, again, the belief that the manufacture of the beet-sugar could never come in competition with the colonial.

This might have been the final catastrophe of the manufacture of the beet-sugar, had it not been for the efforts made to revive it again by some wealthy and enlightened manufacturers.

These efforts, however, did not arise entirely from the patriotic desire to promote the welfare of France, (as now pretended,) but partly to prevent the loss of immense capitals invested in buildings, apparatus, farms, &c. Moreover, the manufacturers knew there was yet five or six per cent. more to gain by an improved operation.

This it was that gave a new start to this favorite branch of industry; and chemistry, particularly adapted to improve the art and manufacture, assisted in simplifying the process, and discovered the mode of *reviving* animal charcoal so as to admit of its being repeatedly used, while the improved apparatus helped to economize labor and fuel; and all this, combined with a wonderful perseverance, reduced the expenses of the fabrication, and enabled the old establishments to continue in operation, even when the price of colonial

sugar was very low. This created confidence and a rapid increase of establishments.

The cultivation of the beet has had the most beneficial influence on agriculture; as, in the last year, more than eighty thousand acres of land were planted in beet, producing about one million of tons of this root; and, as generally rotations of four crops are adopted, it brought at least three million two hundred thousand acres of land under the highest cultivation.

The following table shows the rapid increase of the manufactories, and the quantity produced, in France.

In 1828 there were 103 manufactories, which		
		Beet-sugar.
		100,000 cwt.;
1831	200	220,000
1836	543	950,000
1837	600	1,000,000

Or 20,000 tons of beet-sugar.

The manufacture of indigenous sugar did not affect the demand for colonial sugar, as the consumption continually increased until the year 1836, as appears by a table from the Journal of Commerce of 1836, viz :

In	Consump. of colon. sugar.	Con. of beet-sugar.
1825	61,255,232 fr.	4,000,000 fr.
1831	67,542,792	10,000,000
1832	62,669,638	15,000,000
1835	69,000,000	30,000,000

But, in the year 1836, France imported only 75,120 tons of colonial sugar—a diminution of 15,630 tons in one year; a *quantum* too large not to alarm the proprietors of the sugar plantations in the French colonies, and particularly in Martinique, who looked, some years ago, with an ironical smile at the beet-sugar manufacturer. They, who have ridiculed and caricatured every improvement in this branch of industry, felt themselves forced to send, in 1835, Baron de Cools, with the following proposition of the French Government, viz : demanding—

1. Diminution of the duties upon French colonial sugar of 50 per cent., and a proportional reduction of duties upon the foreign colonial sugar.
2. The permission to export the colonial sugar direct to a foreign market.
3. A careful examination and investigation how the French colonial and beet-sugar manufactories can be equally taxed.

The latest news from France states that the Government came, finally, to the conclusion of an equal taxation upon the indigenous and colonial sugar, as may be seen from the following extract from a New York paper, (*Morning Courier and New York Enquirer* of December 18, 1838,) dated

[By the Ville de Lyons.]

"PARIS, October 30, 1838.

"A branch of industry, (the offspring of necessity under the empire,) the production of sugar from beet-root, has engaged much attention in France, and has been carried on with success, and to a vast extent. The natural consequence has been, that sugar, the produce of the French colonies, which is burdened with a very large duty on importation into France, *was beaten out of the market*. Appeals were made by the *suffering colonists* of the Government, repeatedly, representing the distress into which they had fallen from this circumstance; the irremediable ruin that

would necessarily fall upon them if the present tariff were maintained, and soliciting relief. After a variety of expedients to evade a decision on the point, the Government has just come to the resolution of proposing to the Chambers, (which are to meet on the 24th December,) to reduce the import duty on colonial sugar by $8\frac{1}{2}$ francs per cwt., which, with a precisely similar excise duty levied on the beet-root, or home-grown sugar, will, they say, suffice to reopen the market to the colonies."

Such is the state and results of the indigenous sugar manufacture in France.

What is the progress of this branch of industry in the other parts of Europe?

England, (the mother of colonies,) which was very much prejudiced against the manufacture of indigenous sugar, seems to see, in the adoption of it, the only means of improving the physical and moral condition of man in her colonies; and she has already overcome some of her prejudices, and has begun to establish manufactories. The following article, taken from the London Mechanics' Magazine of 1836, (No. 169,) will show its progress:

"A refinery of sugar from the beet-root is being erected at Thames bank, Chelsea, which, it is expected, will be in operation in about six weeks. In the vicinity of the metropolis, during the past summer, a great many acres of land have been put into cultivation with the root at Wandsworth and other places. The machinery will be principally on the plans of the vacuum-pans, and a pure refined sugar will be produced from the juice by the first process of evaporation, after it has simply undergone the process of discolorization. Another part of the premises is appropriated to the manufacture of coarse brown paper from the refuse, for which it is extensively used in France. In case the Government do not interfere, and, by rendering the product excisable, retard or prohibit its manufacture, several individuals have it in contemplation to establish refineries in different parts of the kingdom for purifying sugar, which may be produced in agricultural districts for domestic or foreign use. A refinery has lately been established at Belfast, in the vicinity of which town upwards of two hundred acres of land have been put in cultivation with the beet-root for the manufacture of sugar."

Russia, which adopts every useful improvement in manufacture, has, in the southern departments, large manufactories of beet-sugar, by which she expects to furnish some of the Asiatic markets with this article. So have Bohemia, Hungary, Austria, and Switzerland large beet-sugar manufactories, in the most flourishing condition.

The Germans, though the discoverers of the crystallizable sugar in the beet-root, until 1836 made very little progress in its manufacture. This is to be ascribed as well to the continual war with France, which checked every improvement, as to the uncertainty of the business itself. The Germans, well aware and well informed of every improvement made abroad, never found it sufficiently lucrative to embark in it; but it seems that this nation, which has given the world so many great and important discoveries, was destined to bring its own discovery of the extraction of the sugar from the beet to perfection. This was accomplished by Mr. Schuetzenbach, of the Grand

Duchy of Baden. Schuetzenbach, re-examined carefully Markgraft's experiments, and found that the first experiment of this great chemist, made eighty-nine years ago, is the best method, when modified, to produce, with less labor and expense, eight pounds of white refined sugar out of one hundred pounds of the raw beet-root. This improvement it is which will, in a short space of time, exclude all the colonial sugar from the European market, as well as our own. This improvement, also, will change the condition of millions of men in the colonies.

The opinion and judgment of a nation, jealous of every discovery or improvement made in other countries, and especially in this branch of industry, in which it has sacrificed millions of francs for its perfection, will serve as a proof of the importance of the new improvement. These new discoveries are detailed in an article which appeared in the *Journal des Debats Politiques et Diteraires*, in Paris, dated the 16th July, 1838, by Michel Chevalier, viz:

"It would seem that the spirit which was manifested in the days of the Revolution, has been transferred from the political arena, and is exerting itself in that of industry. At this time the manufacture of sugar from beets is on the point of undergoing a metamorphosis which, as it appears, will change all the condition of its existence, and extend its influence, not only to the consumption, but also to the production of that article.

"Until now, a series of operations has been applied to the extracting of sugar from the beet, which, though simple enough in appearance, are in reality complicated and delicate; which demand not only a great number of intelligent and skilful workmen, but also require considerable material to be operated upon; and which, again, consume costly articles, such as milk, blood, animal charcoal, &c.

"In the former process the sugar-beet was scraped; the pulp pressed by means of an hydraulic press. The juice so obtained underwent defecation, or the separation of the albuminous and mucilaginous elements, and then the clarification and evaporation. Once concentrated, the sirup underwent crystallization, which furnished the raw sugar; and this then had to be refined before it could be admitted on our tables.

"Since its origin, the process of extracting the sugar has always been the main point, but it has been modified and improved in the details; so much so, that our manufacturers, who were ruining themselves when the sugar was at six francs the pound, are becoming rich at the low price of 20 sous per lb. At this time the scraping, pressing, defecation, clarifying, and evaporating were attended with difficulties, which it required a great length of time to subdue. The loss in manufacturing was enormous, as only from three to five parts of sugar were obtained from a hundred pounds of beets, instead of ten pounds, which are contained in the root.

"With the assistance of chemical analysis, it was ascertained that this evil proceeded from the presence of a certain quantity of acid, of divers coloring, mucilaginous, and gelatinous matters, suspended in the juice. The presence of these mischievous substances injures the sugar, prevents it from crystallizing, sometimes destroys it, and causes it to yield only poor molasses. To pre-

vent these injurious effects, different agents have been used, which were found more or less efficacious. Apparatus was constructed, which accelerated the manufacture, and diminished the time during which the sugar is in contact with these injurious substances; but the inquiry was never made whether it were possible to separate the sugar from those foreign bodies, or at least to neutralize or paralyze their destructive power, before the juice is extracted.

"The new process, first alluded to, was discovered in the grand duchy of Baden, by Mr. Schuetzenbach, of Carlsruhe. The experiments introduced a method of manufacturing the sugar which was adopted by several manufacturers on the right bank of the Rhine, and which is already in vigorous operation.

"Like all ideas which are destined to accomplish revolutions in manufactures, as well as in politics, that which serves as basis to the new process is simple. The operation of drying the beets immediately after they are taken from the field, is now the first step in the process. By this operation, the mucilaginous matter, which is an integral part of the beet, loses the property of dissolving in water; this drying stops also the fermentation which takes place during the preservation of the beets in cellars or in the heap, and likewise prevents the formation of acids, which were created at the expense of the sugar, and which embarrassed the manufacture of beet-sugar.

"When the beets are once dried, the sugar is easily obtained by mixing them with a small quantity of water, which produces a solution of sugar and a very small portion of other bodies, and which, by the process of evaporation, gives at once a good product, which can be easily refined.

"In a word, the elementary operation of the desiccation acts with the power of exorcism; it drives from the juice all injurious substances which were the former causes of evil in this manufacture.

"This fact being once understood, and duly verified by experiments on a large scale, it was then important to bring it to perfection by an easy practical manipulation. This is what the '*Societe d'Encouragement*' is about to undertake, and that with every chance of complete success. This is already much more than mere expectation, because the problems which it has proposed are already more than half solved, and the entire solution of them is scarcely a matter of doubt: so that the manufacture of the sugar from beets is about to be built on a new basis.

"The '*Societe d'Encouragement*' have offered the following prizes for the promotion of this manufacture:

"1. One of 4000 francs for the best process for the desiccation of the beets.

"2. One of 4,000 francs for the best treatment of the dried beet for the extraction of the raw sugar.

"3. One of 4,000 francs for the conversion of the raw into refined sugar, without taking it out of the mould.

"4. One of 3,000 francs for an analysis of the beet root, &c.

"5. One of 3,000 francs for the invention of a

saccharometer, which should be so constructed as to be easily applied, and to have the property of showing immediately the quantity of crystallizable sugar contained in the fluid under trial. A contrivance of this kind, which would be a sure guide for the farmer, and for the workman in manufactories, indicating to the former the proper time to collect his crop of beets, and to the latter how to manage his operations, would be of immense value.

"When these five prizes are gained, the theoretical and practical renovation of the manufacture of beet-sugar will be radically accomplished in all its forms.

"To the question, *Will this be effected?* it may be safely answered that existing facts scarcely allow of the expression of a doubt that such will be the case.

"The problem of the complete and rapid desiccation by an economical process has presented very formidable difficulties. *This drying may be denominated the corner-stone of the new system*; but this problem is far from being insolvable; on the contrary, it ought to be regarded as solved.

"In one of the last sessions of the *Société d'Encouragement*, Mr. Beyrand, of Marseilles, presented beets cut in slices, which were dried in eight minutes by the combined action of pressure and heat, effected by two cylinders, heated to 100 degrees by steam. This result will appear more prodigious when we consider that 100 parts of beets contain 84 parts of water.

"The beets, prepared after Mr. Beyrand's method, preserve all their sweetness. Mr. Schuetzenbach, of Baden, dries the beets by a slow process, probably less perfect than Mr. Beyrand's method; but the result is already excellent, and favors the application on a large scale. In the manufacture of Mr. Schuetzenbach, the beets are cut in small thin slices, and, as soon as they come in contact with the air, they bend and roll up, and lose the property of sticking together, which gives the hot air of a kiln (to which they are brought immediately after they are cut) a free circulation in all directions round them. The temperature of these kilns is from 20 to 40 degrees Reaumur, (from 99.5 to 122 degrees Fahrenheit.)

"Mr. Schuetzenbach's apparatus of desiccation is very economical. The machine for cutting the beets costs only from 400 to 500 francs, and half a horse power is sufficient to put it in operation. Such a machine, when at work every day for three months will cut one million kilogrammes of beets, (about 1,000 tons,) which would be a sufficient supply for a large manufactory. A kiln, about 10 feet by 9, and 9 feet high, dries, in 24 hours, 3,000 pounds of beets, and consumes only 420 pounds of charcoal. Three such kilns would be sufficient to dry all the beets cut by one machine during twelve hours.

"In the manufactory of Mr. Schuetzenbach the dry beets are reduced to a coarse powder, sprinkled over with lime, and stored away in casks.—When the sugar is to be extracted, this coarse powder is mixed with water, which produces a liquor marking 21 degrees on the saccharometer; and when evaporated with Roth's apparatus, this liquor yields, without any other preparation at the first crystallization, a raw sugar, known in commerce by the name of *bonne quatrième*, which, after a second crystallization, becomes a *bonne*

commune. The advantage of this new method is such, that the beets raised at Esslingen, in Germany, in 1837, (less rich in sugar than the preceding year,) yielded more than eight per ct. of crystallizable sugar, instead of five, which was the highest product by the old process; and, in the proportion as the gain on sugar increases, the expenses decrease; so much so, that eight pounds, now obtained, costs less than formerly four or five from 100 pounds of beets.

"Two important points are then attained: *first*, how to dry the beet; and *second*, how to extract the sugar from it.

"To refine the raw sugar, without taking it out from the moulds in which the syrup was placed to crystallize, and which always causes the loss of a considerable quantity of sugar appears to be a question equally advanced. Recent experiments, on a large scale, show that raw sugar washed in moulds, with pressure, gives, in the short space of three days, a perfect refined article, which formerly required from two to three weeks to effect.

"In regard to the analysis of the beet in its divers states of maturity, nothing has yet been attempted; but this is a task which chemists can at any time accomplish, and the prize held out for it will induce many a chemist to undertake it; and it will not be long before we know to what extent the constituent parts of the sugar-beet develop themselves simultaneously, and which is the most favorable moment for collecting them for the manufacture of sugar.

"In regard to an exact saccharometer, of a simple and practical construction, with the aid of which all manufacturers can ascertain, to a fiftieth part, the richness of the saccharine matter in beets, and of all other substances containing crystallizable sugar, the learned researches of a young chemist, M. Peligot, promise great success. Lime and baryte, have that property to combine with crystallizable sugar, and form together an insoluble composition, in which, nevertheless, the sugar does not alter, and is easily separated from it. In bringing this fact to a simple mechanical operation, no doubt is left that the quantity of sugar contained in beet sirup can be ascertained with the greatest nicety.

"The problems proposed by the *Société d'Encouragement* are at this time almost solved. It does not any longer propose to discover a new method, but only to perfect the processes which are already verified, by an application on a large scale. Among the advantages which are derived from the renovation of the manufacture of the beet-sugar, is the extension of the culture of the beet-root; because it will be easy for every farmer to send his dry product to any market, far or near, as the weight of the raw beet is reduced, by the process of desiccation, to less than one-sixth part. The beet can now be raised anywhere, however distant from the manufactory; and, reciprocally, it is possible to establish manufactories in all parts of France, to concentrate them in such places where fuel is plenty and at a low price; whereas, at present, the manufacture is only possible close to a field fertile enough to produce beets. Another important fact: 1,000 pounds of beets contain 100 pounds of sugar. The price of beets is about 12 francs; the expense of drying and extracting the sugar would not exceed 10 francs,

(this is sufficiently proved by experiments;) making the total amount 22 francs. Suppose that one-tenth of the sugar is lost, the manufacturer would have 90 pounds of sugar for 22 francs, or 100 pounds for less than 25 francs. Allowing for small expenses, &c., 50 per cent., the sugar (the refined sugar of this country) could be delivered to the consumer for 38 centimes, (or 7½ cts.) per pound.

"This will create a revolution in the consumption of sugar, as well as in the division of the branches of industry, over the whole globe; then instead of importing sugar from the southern regions it will be left for us to furnish them.

"MICHEL CHEVALIER."

Another proof of the practicability and great advantage of this improvement, is the enthusiasm with which it was adopted and put into operation by the Germans themselves, who are generally very careful and prudent in all their speculations. They have already established extensive manufactories on the Rhine.

The importance of Mr. Schuetzenbach's discovery is best proved by chemical analysis and examination of the physiology of plants. This analysis of the beet-root shows that 100 parts of the root contain—

86.8 parts of water,
3.2 parts fibrous matter,
10.0 parts of crystallizable sugar,
0.5 parts of mucilage.

By the new process, the water in the beet is evaporated, and there remain only 13.7 parts of dry substances, which consist of the sugar, mucilage, and fibrous matter.

The sugar dissolves in cold or warm water almost instantaneously.

The mucilage is indissoluble in water; when in a dry state and mixed with water, it only swells to a slimy matter.

The fibrous matter is indissoluble, and has neither in the old nor new process any injurious influence.

From this analysis we learn that the mucilage is the only substance which causes all the difficulties of the extraction of sugar. The principal process consists, then, in the separation of the mucilage from the sugar. But is this mixture a work of nature, or the result of the manipulations? or, does the cellular tissue, of which the beet-root is formed, contain the sugar in its pure state, separated from the mucilage?

These are questions as to the physiology of the beet, which were first suggested by Raspail, a French chemist, (in his work on the physiology of plants, Paris, 1837,) and he solved these important problems by the following microscopic experiments:

"When a thin slice of the red beet-root is brought under the focus of a microscope, it will be observed that the texture of the beet is formed of hexagonal cells, transparent, and of a purple color; these cells are crossed by white ones, four or five times longer than the purple cells; this tissue of white cells is crossed again by bundles of opaque cylinders, of a gray color, through which the spirals (*elements generateurs*) are observed.

"When a drop of acid (*acide sulphurique albumineux*, which has the property of coloring saccharine substances purple) is put on this thin

slice, the colors change; the part which was purple turns yellowish, the long cells remain white, but the opaque cylinders become purple."

From this it follows that the cells, naturally purple, enclose the coloring matter and the mucilage, and the opaque cylinders the sugar in its pure state. Thus the mucilage in the beet-root is separated by nature from the sugar, and mixed during the manipulation, which caused all the difficulties of the extraction in the old process, when the mucilage was combined with the sugar in grating, pressing, and even in defecation.

To separate this five-tenths parts of mucilage which the beet contains, occasioned not only the loss of considerable sugar, but also labor, fuel, and costly material, as, for instance, animal charcoal, blood, &c.

The new process acts entirely in conformity with the results of scientific investigation, and the whole process is reduced to a simple operation, which gives a sure gain of 8 per cent. of white refined sugar from 100 pounds of the raw beet-root.

The beets are now cut in thin slices, dried before any fermentation can take place, ground to fine powder, so that all cells are broken apart, and mixed with water, which dissolves the sugar before the mucilage begins to swell. The pure uncolored liquor obtained is evaporated, and the sirup brought into moulds to crystallize.

These statements should be considered as a sufficient proof of the infallibility and practicability of the new improvement; and the introduction and general adoption of it in this country would be of the highest importance to the welfare of its population.

Some enterprising citizens of the United States sent agents to France to investigate the manipulations of this branch of industry; but the results have yet effected very little, and the sugar produced from the beet in this country is of no great account, which arises probably from the want of skilful and intelligent operators in the former complicated manipulations. But, at present, in Europe, the manipulations are reduced to a process much simpler than brewing common table beer, which can be comprehended and performed by every person. The period is not distant when farmers will produce their own sugar, or at least raise and dry the beet ready for the manufacturer.

The general argument against the introduction of this branch of industry, that labor is too high in the United States, is incorrect, when we consider the other great advantages which the United States have over every other country on the globe in almost every business, and especially in this branch of industry:

1st. The United States possess a climate which suits the beets better than any climate of Europe, because the summers are excessively warm, which increases the saccharine property of the beet root.

2d. Plenty of cheap and rich land, subject to but a small tax.

3d. Inexhaustible stores of fuel, from which the great natural water-courses, railroads, and canals branch, over the whole Union.

4th. Well-constructed labor-saving machines of all descriptions.

5th. An intelligent population, which, when once acquainted with this branch of industry, will soon bring it to great perfection—a popula-

tion understanding the use and management of machinery, and famous for improvements and inventions. Whereas, in Europe, the land is overtaxed, high in price, and therefore the interest upon it considerable; subject to tithes and other feudal burdens; while the fuel is scarce and valuable, and its transportation high and slow. The population are entirely unacquainted with labor-saving machines, and possess very little mechanical ingenuity, while their enterprise is prohibited by the excise laws of their petty governments.

It is obvious that America overbalances, with its advantages, the low prices of labor in Europe; and that she is able not only to provide herself with all the sugar wanted for home consumption, but also to supply other countries.

The sugar now produced in Louisiana averages only about $4\frac{1}{2}$ pounds per head for the population of the United States, or about 70,000,000 pounds annually, which is but a small part of our consumption, as enormous sums are yearly paid to foreign countries for sugar, as the following table shows, viz:

1832, imported into the U. States,	\$2,933,688
1833, do. do.	4,752,343
1834, do. do.	5,537,329
1835, do. do.	6,806,184
1836, do. do.	12,514,551

This sum will annually increase in proportion as the population augments and their comforts and means improve.

By the adoption of this new branch of industry, the sums at present paid for imported sugar would be in short a clear gain to the country: its agriculture would be improved, and thousands of acres of exhausted and deteriorated land would be again taken up and improved. To procure the necessary manure for this purpose, the farmer would be obliged to increase his live-stock, which would find, during the winter season, plenty of food in the residuum of the manufactory. It would increase the consumption of sugar among the less wealthy class, and would make their condition of life more comfortable, and, of consequence, greatly extend the population of the country.

The manufacture of sugar is not confined to the beet and cane only. In Hungary there are at present manufactories which make sugar from pumpkins. The following article, translated from the *Hanoverian Communicator*, 1837, gives the particulars, as follows:

"A manufacturer in Hungary, for three years past, has used pumpkins for the manufacture of sugar. We have seen raw and refined sugar, also sirup from this manufactory, and found the refined sugar equal to the colonial in every respect. The raw sugar is crystalline, coarse-grained, light-colored, and of more agreeable (melon-like) flavor than the common raw beet-sugar; the sirup is of a blackish-green color, and has also a melon-like flavor, but is suitable for consumption. The juice, obtained by pressure, yields, on an average, six per cent. of sugar; but the water-melon of the south of Hungary is still more productive than the pumpkin of the north. The sugar obtained from the pumpkin is always considerable, whether the fruit has been raised on rich or poor land. The manipulation is said to be more simple than the manufactory of beet sugar, and requires less attention, as the pulp and the juice

may stand for three weeks without getting sour or losing any quantity of sugar. The juice, during the process of evaporation, does not rise in the boilers, and is not so liable to be burnt. The residuum is very good food for cattle. One acre produces 650 cwt. of pumpkins; twenty pumpkins yield sufficient seed for one acre of ground. From the remaining seed a very good table oil of about 16 per cent. can be obtained.

"MARQUARDT."

Indian corn, at the period of tasselling, yields just half as much sugar as the sugar-cane; and it is astonishing that this well-known fact did not induce persons to plant corn especially for that purpose.

To make use of green corn and pumpkins profitably, and to improve the crop of beet in quality and quantity, the following plan is, therefore suggested, which would keep a manufactory in operation all the year round:

We know that the beet requires a deep soil, sufficiently provided with decomposed manure, as when planted in green manure they yield much less sugar, and the operation is rendered more difficult; to prepare the field properly for the beet, it should be well manured, (no matter in what state the manure may be applied,) ploughed, and planted in corn and pumpkins, and worked regularly as long as the pumpkins leave room for the horse-hoe. When the corn begins to form the tassel, it should be cut off, and the sugar extracted from it. The pumpkin has then all the influence of the sun to come to full maturity, and should be used, when ripe, for sugar. The following year the field would be in first-rate order for the beet, and the following rotation of crops, viz:

Indian-corn and pumpkins, with	} for sugar,
manure,	
Beets,	
Barley,	
Clover,	
Wheat.	

An acre of good cultivated land yields, on an average, twenty tons of the beet-root. Beets were sold this fall, near Boston, for \$5 per ton.

One ton of beets yields, when treated after the new method, 180 lbs. of white refined sugar. The cost of manufacturing a ton of beets into sugar would be, at a very high estimate, \$6. One hundred and eighty pounds of refined beet-sugar would cost \$11, or 6 1-10 cents per pound, for which we now pay, at the lowest rate, 15 cents.

Mr. Norbert Rillieux, of New Orleans, has recently invented an apparatus for reducing saccharine liquids, which has been patented in the United States, and is already tested.

This apparatus surpasses Howard's and Roth's, or any other invention of this description, not only in simplicity and cheapness, but also in the arrangement in the boiling of sugar, according with the laws of science and economy.

The liquor is reduced by two vertical cylinders, heated by steam, over which the syrup is distributed in small quantities. One of the cylinders operates under a vacuum, and entirely evaporates the condensed liquor by a low degree of heat, to hinder the formation of molasses—an improvement of the highest importance, which, till now, has never been accomplished. The syrup can be increased to any degree of the saccharometer de-

sired, which is performed by the most ingenious and simple contrivance of a differential thermometer. This apparatus will greatly facilitate the manufacture of sugar, in regard to the economy of labor, fuel, and time, and the perfection of the product. This apparatus will rank among the most ingenious and important inventions.

The production of indigenous sugar in France was one of the main pillars of *Napoleon's continental system*; and the successful extraction of sugar from the beet was relied on as the surest guaranty of its stability.

That branch of productive industry, therefore, which the first statesman and captain of the age regarded alike as the means of conquest and the source of wealth and independence, cannot be considered a matter of indifference to the Government of this great and growing republic, whose duty and privilege it is to watch over the interest and welfare of its citizens—a Government aspiring to no conquest, yet whose enviable distinction it is to be regarded as the last hope of freedom—the last asylum of liberty.

The information imparted in the preceding pages, collected as it is from the most authentic sources, it is hoped will be regarded as of the highest importance to any and every government charged with the duty of promoting the great interests of a nation.

Having traced the history and progress of the manufacture of the beet-sugar, from the first discovery in Europe to the present time, through all its varied experiments and decreasing expenses, until no longer requiring the bounty of Government, but yielding a revenue, the only remaining inquiry is, how shall the American people avail themselves of the important advantages of this new source of national wealth and industry?

To acquire a correct and minute knowledge of this new branch of industry, (now practically unknown in this country,) it is necessary to visit Hungary, Germany, France, and England, in order to examine all the recent and important discoveries and improvements relating to the manufacture of beet-sugar. To accomplish this object, it would require the following qualifications:

1. A thorough knowledge of the old method of extracting sugar from the beet, and every apparatus hitherto used.

2. A thorough knowledge of agriculture, in order to ascertain the precise cost of the production of the raw material, the influence which it has on the different systems of agriculture, and the economy in regard to the feeding of cattle, &c.

3. A knowledge of chemistry and physics.

4. A knowledge of the languages of the different countries to be visited, and a thorough acquaintance with technical and vulgar terms in mechanics and agriculture, as well as the *patois* of the countries.

5. A knowledge of mechanics and the art of drawing, in order to be able to delineate any apparatus at first sight, and at a glance, as manufacturers are not always willing to have their apparatus examined minutely.

CHARLES LEWIS FLEISCHMANN,
Graduate of the Royal Agricultural Institute of Bavaria.

PATENT OFFICE,

Washington, December 27, 1838.

PATENT OFFICE, December 28, 1838.

SIR: At the request of the author of the accompanying memorial, I have the honor to submit the same to your care, for such disposition as you shall deem best calculated to promote the wishes of Mr. Fleischmann, and the interests of the country.

Allow me to state that Mr. Fleischmann, is a gentleman of varied practical and scientific information, and has been for the last two years a resident of this city, and employed by me in the Patent Office. He is a native of Bavaria, and was educated in the Royal Agricultural and Polytechnical school at Schlessheim, near Munich, at which he graduated with distinguished honor, and was appointed *Inspector of the Public Domain*—an office of great responsibility, and rarely conferred but on men of advanced age; he was also director of the estates of Count Seinsheim, comprising twenty-four village. Emigrating to this country with much experimental knowledge, and well versed in the French and German languages, he has, at my suggestion, draughted this memorial, which I believe cannot fail to be read with deep interest, comprising as it does the most important and latest discoveries in the manufacture of beet-sugar, drawn from publications recently received at this office from Europe.

Should the Government desire the services of an agent to investigate this subject by visiting the manufactories of Europe, I would respectfully recommend the author of this memorial.

With the highest respect, I remain your obedient servant,

HENRY L. ELLSWORTH.

HON. RICHARD FLETCHER,
House of Representatives.

The following articles are republished from our paper of the 8th inst. by particular request.

THE NATIONAL SILK CONVENTION.

In looking over the proceedings of this body, it appeared to us proper that we should make a few general remarks upon their character and tendency, so as to arouse the attention of the people to a just estimate of their profound importance. It will be recollected that but a few weeks notice had been given for its meeting, and we are sure the reader will be surprised to learn that, on the first day of its assemblage, *one hundred and seventy-five members* were in attendance; that before its adjournment, *three hundred members* were present, and that *eleven states* besides the *District of Columbia* were represented, thus manifesting the deep and absorbing interest that has been awakened to the success of this new and lucrative branch of agricultural industry. To us—who have labored for years with an honesty of purpose, and a zeal that nothing could repress; who have looked on unmoved amidst the sneers of the ignorant, and the taunts of others, who were either too idle to investigate the question, or too indifferent to the issue to encounter the labor—we confess that the array of talent, virtue, and respectability, which were to be found in the *Convention*, was indeed a most gratifying and heart-cheering spectacle. In it we beheld the sure and unerring evidence, that the silk culture had taken a deep and abiding root in the affections of the people; and we seize this occasion to congratulate

our countrymen on it, as being one of the most auspicious events that have happened in the history of our country, not even excepting the one which occurred on that proud day, when the fathers of our land, at the "peril of life, liberty and property," declared that "we were, and of right ought to be, a free and independent people." We say this with a full knowledge and just appreciation of the value in a moral and political point of view, of all the leading points connected with it. The declaration of independence set forth, in the stern language of indignant patriotism, the wrongs which had been inflicted upon the then colonies—the recital of those wrongs, couched as it was in the language of truth, carried with it a moral force that rallied around our standard every heart that was prepared to make a generous sacrifice on the altar of patriotism—to go his death for his country. It went farther—it awakened the latent feelings of love of country in many breasts, where a spirit of neutrality had previously dwelt; for they saw that, as the sword had been drawn, and the scabbard thrown away, the only alternatives left were, either to come to the rescue of the Republic, or to incur the blasting odium of being traitors to the land of their adoption or birth, and choosing the former, they too, rallied under those stripes and stars that carried Washington and his compeers triumphantly through the unequal contest, and won for us our national existence. By the *declaration of independence* then, and the glorious deeds achieved under its auspices, our *being as a political people* were attained; and if we could, or if it had been desirable for us to have remained exclusively an agricultural and manufacturing community, our independence would have been complete. But as the germs of commerce had been already planted, a higher and more noble destiny awaited us, and it was reserved for us to become the second commercial country in the world. Our independence acknowledged, and the treaty of peace between us and our theretofore mother country established, the confidence and friendship of other nations were thus secured, and alliances of peace formed. This laid the groundwork of extensive commercial relations with the nations of every sea known to civilized man; new sources of wealth opened to our acceptance; the spirit of commercial enterprize already awakened, became reinvigorated, and our adventurous tars were seen filling their sails in every ocean. Year after year has rolled around but to increase our distant trade, and had the productions of our soil—had our exports kept pace with our imports, all would have been well—the body politic would this day be sound to the core. But as with individuals, so it is with nations; when either buys more than it has the means of paying for, embarrassments must ensue; and neither can be said to be independent, with a large pecuniary debt hanging over their heads. A nation, by its political charter, may declare its citizens, or subjects, politically free and independent, but the immunities and privileges thus conferred, however sacred in the eye of patriotism—however fondly they may be cherished by those who dwell under their protecting influences, do not vouchsafe the full fruition of man's independence in the broad sense of the term, unless his fiscal affairs be also free from difficulties. As a people then, no nation can be said to be independent, whatever may be the con-

dition of their political rights—no matter how free the institutions under which they live may be, where a large balance of trade is against them. If they *buy more than they sell*, dependence for a time is the necessary consequence—this dependence, it may be said, is but *temporary*; still view it as you may, blink the question as, and how you may, the grating fact stares us in the face. The late monetary difficulties of our country go strongly to corroborate our position; and notwithstanding much of the mischief was done by home speculations and ill concerted fiscal arrangements here, still the evils arising from this cause, were but as drops in the bucket, compared with the volume of water in the ocean, when relatively considered with those which arose from the excess of our foreign debt over our then present means to meet it. In the midst of all the troubles through which we have just passed, what would have been our condition but for the surplus products of agricultural labor—our cotton, sugar and tobacco—which were so judiciously made to appease our foreign creditors. We say then, that to be truly independent, we must so far *raise* the value of our *exports* as to meet that of our *imports*, or reduce the latter to the standard value of the former. Our course ought to be to pursue the first mentioned plan, and we maintain that we may accomplish it in a few years, if the American farmers and planters will, as they ought to do, generally introduce the Silk culture as a small branch of their respective systems of culture. Two acres in every hundred occupied in the growth of grain, will, in ten years, if devoted to the *raising of silk*, give us an aggregate amount of additional values, which will place us in the more wholesome relation of *creditor*, instead of being as we now are *debtor* to the nations of Europe; and while this salutary national condition will be brought about, without any extraordinary diversion of the present agricultural force of the country from its usual pursuits, the degree of individual happiness and comfort, which will be dispensed throughout the land, will be still more beneficent. And hence it is, that we have seized upon the occasion to congratulate our countrymen on the evidence furnished by the proceedings of the Convention, of the existence of a feeling and an interest among the people, in behalf of the silk culture, which will carry it onward until it works out the regeneration of our country from pecuniary thralldom; gives employment to the industrious poor, increases the competency of those in better circumstances, and opens to the destitute widow and her helpless little ones, the possession of that which will "bind up their wounded hearts and pillow their aching heads."

THE STATE SILK CONVENTION.

We publish in our journal to-day the proceedings of the meeting of the friends of the Silk culture held in this city on the 2d inst. to appoint delegates to the State Convention to be held at the city of Annapolis on the 15th inst. and commend them to every friend of the cause in Maryland. Approving of the objects contemplated to be attained by the convention, and deeming them of the very first importance to the future well-being of the state, we trust that every county in it will take prompt and efficient measures to be represented. Possessing, as Maryland does, a cli-

mate and soil peculiarly adapted to the Silk culture, we indulge the hope that her citizens will manifest a proper and becoming zeal in her welfare on this occasion. Should they do so, the day is not distant when her *exports* of raw silk will exceed, in value, those which she now derives from wheat and tobacco. Believing as we religiously do, that this auspicious state of things may be brought about in ten years, if our advantages are properly improved, we are sure we will be excused for urging upon our people the earliest attention to the subject, and for hoping that the culture may find favor with the legislature, whose province it will be to carry out the views of the approaching convention.

SILK CULTURE.

We extract the following from Gov. Shannon's message to the legislature of *Ohio*, and are pleased to find in his first official communication to that body, he has shown himself attentive to a branch of agricultural industry most worthy of the fostering care of the government of that, as of every other state in the union. Nor are we less pleased to find by the Governor's notice, that a very lively interest has been awakened to it in that quarter, as from the intelligence, industry and enterprise of the people of *Ohio*, we are sure, that its march will be onward. The example so praiseworthy set by Governor Shannon, we trust will be followed by the Executives of the other members of the confederacy, and that the several legislatures, where encouragement does not already exist, will have the moral courage to carry out the views which may be recommended to their adoption.

Governor Shannon observes:—

"The agricultural and mechanical branches of business, being the sources of all real and substantial wealth, are entitled to the special favor of the legislature. The culture of silk, in various parts of the State, is exciting much interest among many of our agriculturists and manufacturers, and, it is confidently believed by those whose experience and knowledge entitle their judgment to considerable weight, that our soil is as well adapted to this kind of business as France or Italy, where it has added so much to the national wealth of those respective countries.

From the experiments which have been made, it may be said with certainty, that the successful culture of silk in *Ohio*, is no longer a matter of doubt; all that is wanting to render the business entirely successful and prosperous, is the direction of public attention to the subject; and to extend to it in its infancy, and for a limited time, some legislative aid by allowing a bounty to the producer of the raw material. A laudable anxiety has been manifested in several of the states to encourage this branch of industry by extending to the producer, a liberal bounty, for a limited time, and it has been the cause of directing public attention to the subject, and bringing into active operation the manufacture of this valuable article. I would recommend the adoption of a similar policy in our own State."

ROBERTS' SILK MANUAL.

Price per single copy, 37½ cts.—to dealers who take 100 copies or more, a deduction of 33½ per cent. discount will be made; to those who take a less number, 20 per ct. will be allowed.

SEEDS, PLANTS, FLOWERS.



The subscriber offers for sale at his establishment a fresh supply of **GARDEN SEEDS** of the very best quality; those that cannot be grown in this country he imports direct from Europe from a source that can be relied on.

Besides a large collection of **GREENHOUSE**, hardy **ORNAMENTAL TREES** and Shrubs, Herbaceous Plants, and Bulbous Roots, and a choice collection of the very finest double Dahlias offered for sale, all on reasonable terms, wholesale or retail.

Also on hand a few bushels of **ITALIAN RYE GRASS**, with 100 bush. **ITALIAN SPRING WHEAT**, of the true kind. All orders for Fruit and Ornamental Trees, or any thing appertaining to his establishment will be strictly attended to, by

JOHN FEAST,
Florist & Seedsman, cor. of Lexington and Pine sts.
ja 22 tf Baltimore.

CHINESE MULBERRY TREES.

American Silk Agency, No. 95, Walnut st. Philadelphia

The subscriber having opened a permanent Agency for the purchase and sale of all articles connected with the culture and manufacture of Silk in the United States, offers for sale all the different varieties of **MULBERRY TREES**, suitable for raising the **SILK WORM**; viz: *Morus Multicaulis* Alpinese, *Brussa Multicaulis* Seedlings. *Morus Expansa*, *Multicaulis* Cuttings, Improved Italian Trees, &c. Also, Cuttings from *Norton's Virginia Seedlings*, and *Cunningham's Prince Edward GRAPE VINES*. These vines produce an abundant crop of fruit, warranted not to rot or mildew and are fine for the table, and capable of yielding the finest wines.

S. C. CLEVELAND, Agent.

SILK AGENCY OF BALTIMORE.

The undersigned has opened the Spacious Room, No. 194 Baltimore street, for the purpose of Receiving, Exhibiting, and Selling on Commission all useful and approved articles connected with the growth, production and manufacture of American Silk. This establishment is designed also to concentrate information and improvement on the subject and advancing this great national enterprise. The following are among the articles which will be constantly or sale, viz:

Morus Multicaulis, Canton, Alpine, Asiatic, *Brussa* and other approved **MULBERRY TREES**, to produce food for Silk Worms.

Cocoons of every variety.

Eggs for producing Silk Worms.

MACHINERY for Reeling and Manufacturing.

Periodicals and Standard Works for giving information.
jan 1 3t* E. CENTER.

SPLENDID BLOODED STOCK FOR SALE.

The proprietor of Covington farm will dispose of the following fine bulls on reasonable terms, viz.

One bull two and a half years old.

One do. six months old.

of the improved *Durham short horn* breed; the dam of the first was got by the celebrated bull *Bolivar*; for size, form and beauty they are not surpassed by any animal in the state.

Three *Devon Bulls*, one of which is seven years old next spring, and the largest *Devon* in the State. The *Devons* are from the stock of the late Wm. Patterson, and of undoubted purity.

Two half *Devon* bulls.

Two bulls half improved *Durham short horn*, and half *Devon*.

One splendid bull, a cross of the *Bakewell*, *Alderney* and *Devon*.

One bull, half *Alderney* and half *Holstein*.

These fine animals may be seen at Covington farm, near *Petersville*, Frederick county, Md. on application to *James L. Hawkins*, Baltimore, or to

se 11 f **FREDERICK F. PERT, Manager.**

FARMERS' REPOSITORY OF AGRICULTURAL IMPLEMENTS AND EAST- MAN'S CYLINDRICAL STRAW CUTTERS IMPROVED.

JONATHAN S. EASTMAN,
Pratt street, Baltimore,
Between Charles & Hanover sts.

feb 20

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every Monday

	PER	FROM	TO
BEANS, white field,.....	bushel.	1 25	
CATTLE, on the hoof,.....	100lbs	8 89	8 90
CORN, yellow.....	bushel		
White.....		90	92
COTTON, Virginia,.....	pound	14	15
North Carolina,.....	"	13 1/2	14 1/2
Upland,.....	"	11 1/2	15
Louisiana — Alabama	"	15	16
FEATHERS,.....	pound.	55	
FLAXSEED,.....	bushel.	1 69	1 75
FLOUR & MEAL—Best wh. wh't'f'm.	barrel.	10 00	10 50
Do. do. baker's.....	"		
SuperHow. st. from stores	"	8 12	8 25
" wagon price,	"	7 75	7 75
City Mills, super.....	"	8 12	8 25
" extra	"	8 50	
Susquehanna,.....	"		
Rye,.....	"	5 50	
Kila-dried Meal, in hhds.	hhd.	19 00	
do. in bbls.	bbl.	4 00	
GRASS SEEDS, wholes. red Clover,	bushel.	14 00	16 00
Kentucky blue	"		
Timothy (herds of the north)	"	3 00	
Orchard,.....	"	2 00	2 50
Tall meadow Oat,.....	"		3 00
Herds, or red top,.....	"	90	1 00
HAY, in bulk,.....	ton.	12 00	16 00
HEMP, country, dew rotted,.....	pound.	6	7
" water rotted,.....	"	7	
HOGS, on the hoof,.....	100lb.	8 00	8 50
Slaughtered,.....	"	8 00	8 50
HOPS—first sort,.....	pound.	20	
second,.....	"	18	
refuse,.....	"		
LIME,.....	bushel.	32	33
MUSTARD SEED, Domestic, —; blk.	"	3 50	4 00
OATS,.....	"	50	53
PEAS, red eye,.....	bushel.		1 12
Black eye,.....	"	1 00	1 12
Lady,.....	"		
PLASTER PARIS, in the stone, cargo,	ton.	4 37	
Ground,.....	barrel.	1 50	
PALMA CHRISTA BEAN,.....	bushel.		
RAGE,.....	pound.	3	
RYE,.....	bushel.		95
Susquehanna,.....	"		none
TOBACCO, crop, common,.....	100lbs	5 00	5 50
" brown and red,.....	"	6 00	6 50
" fine red,.....	"	9 00	12 00
" wrappery, suitable	"		
for segars,.....	"	10 00	20 00
" yellow and red,.....	"	10 00	14 00
" good yellow,.....	"	10 00	15 00
" fine yellow,.....	"	12 00	15 00
Seconds, as in quality,.....	"	6 00	
" ground leaf,.....	"	7 00	9 00
Virginia,.....	"	6 00	10 00
Rappahannock,.....	"		
Kentucky,.....	"	6 00	8 00
WHEAT, white,.....	bushel.		
Red, best.....	"	1 80	
Maryland.....	"	1 75	1 80
WHISKEY, 1st pf. in bbls.....	gallon.	44	45
" in hhds.....	"	41	
" wagon price,.....	bbls		41
WAGON FREIGHTS, to Pittsburgh,.....	100lbs	2 00	
To Wheeling,.....	"	2 25	
WOOL, Prime & Saxon Fleeces,.....	pound.	50 to 55	
Full Merino,.....	"	45 50	
Three fourths Merino,.....	"	40 45	
One half do.....	"	35 40	
Common & one fourth Meri.	"	35 40	
Pulled,.....	"	30 33	
POTATOES, 60 to 70 cts. a bushel.			

THE AMERICAN FARMER.

The proprietors of this paper have a few complete sets of this work on hand, which they will dispose of at the reduced price of \$50 a set.

Oct. 18

3

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,.....	barrel.		
BACON, hams, new, Balt. cured....	pound.	15	
Shoulders,.... do.....	"	12 1/2	
Middlings,.... do.....	"	12 1/2	
Assorted, country,.....	"	12 1/2	
BUTTER, printed, in lbs. & half lbs.	"	31	50
Roll,.....	"	25	31 1/2
CIDER,.....	barrel.	1 75	2 00
CALVES, three to six weeks old....	each.	5 00	6 00
COWS, new milch,.....	"	25 00	40 00
Dry,.....	"	12 00	15 00
CORN MEAL, for family use,.....	100lbs.	2 00	2 12
CHOP RYE,.....	"		1 60
EGGS,.....	dozen.	37 1/2	
FISH, Shad, No. 1, Susquehanna,	barrel.		
No. 2,.....	"	6 00	6 25
Herrings, salted, No. 1,.....	"	11 00	13 50
Mackerel, No. 1, ——— No. 2	"	7 50	
No. 3,.....	"		
Cod, salted,.....	cwt.	3 25	3 37 1/2
LARD,.....	pound.	12	13

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

		VIRGINIA.
U. S. Bank,.....	par	Farmers Bank of Virgi. par
Branch at Baltimore,.....	do	Bank of Virginia,..... do
Other Branches,.....	do	Branch at Fredericksburg, do
MARYLAND.		Petersburg,..... do
Banks in Baltimore,.....	par	Norfolk,..... do
Hagerstown,.....	do	Winchester,..... do
Frederick,.....	do	Lynchburg,..... do
Westminster,.....	do	Danville,..... do
Farmers' Bank of Mary'd,.....	do	Bank of Valley, Winch. par
Do. payable at Easton,.....	do	Branch at Romney,.... par
Salisbury,.... 1 per ct. dis.	par	Do. Charlestown, par
Cumberland,.....	par	Do. Leesburg,.... par
Millington,.....	do	Wheeling Banks,.... 2 1/2
DISTRICT.		Ohio Banks, generally 3
Washington,.....	Banks, 3 p.c.	New Jersey Banks gen. 3
Georgetown,.....		New York City,..... par
Alexandria,.....		New York State,..... do 1/2
PENNSYLVANIA.		Massachusetts,..... 1 1/2 a 2
Philadelphia,.....	par	Connecticut,..... 1 1/2 a 2
Chambersburg,.....	1/2	New Hampshire,.... 1 1/2 a 2
Gettysburg,.....	do	Maine,..... 1 1/2 a 2
Pittsburg,.....	2 1/2	Rhode Island,.... 1 1/2 a 2
York,.....	1/2	North Carolina,.... 3 a 3 1/2
Other Pennsylvania Bks. 1/2		South Carolina,.... 4 a 5
Delaware [under \$5].... 4		Georgia,..... 5 a 5 1/2
Do. [over 5]..... 1 1/2		New Orleans,..... 7 a 8
Michigan Banks,..... 10		
Canadian do..... 10		

FOR SALE,

A valuable FARM of prime soil, on the Western Run in Baltimore county, about two miles north west of the 14th mile stone of the Baltimore and York turnpike road, and at the same distance from the depot of the Baltimore and Susquehanna rail road, at Cocke's tavern, in a rich, highly cultivated and healthy tract of country.

This farm contains from 260 to 270 acres, having a full proportion in wood, much of which is building timber, peculiarly valuable in that neighborhood; is in the best state of cultivation; a considerable part in productive timothy meadow, and the residue of the arable land, not in grain, is well set in clover, the whole under good fencing, laid off into convenient fields, each of which is well watered. The farm has a large quarry of excellent building stone. There are on the premises an apple orchard of select fruit trees, which seldom fail to bear abundantly; a valuable mill seat on the Western Run, with a race already dug. There is no location in the country more favorable for a grist mill, having the advantage of a rich and thickly settled neighborhood, and a good public road leading thence to the turnpike road. Buildings substantial and convenient, being a STONE DWELLING, and kitchen of two stories; a large stone Switzer barn, with cedar roof and extensive stabling below; large hay house and stable for cattle; stone milk house near the dwelling, with a spring of fine never failing water, with other out-houses. On the country road near the mill-seat a good house and shop for a mechanic, under rent to a good tenant. It is well known the lands on the Western

Run are in every respect equal, if not superior to any in the county. Adjoining or near are the lands of Col. N. Bosley, Daniel Bosley, Thos. Matthews and others. The water power, with about 20 acres of land, is so situated that they may be detached and sold separately, without injury to the rest of the farm for agricultural purposes. Terms of sale will be liberal. Apply to

NATHANIEL CHILDS,

on the premises, or to

WILLIAM J. WARD,

Fayette, near Calvert st. Baltimore.

oc 23 tf

DURHAM AND OTHER STOCK FOR SALE.

The subscriber offers for sale the following truly valuable stock, at the prices affixed to each animal. Applications to be made to him at his residence in Philadelphia, Pa. or to the Editor of the Farmer and Gardener, Baltimore, Md.

No. 1. Defiance 2d, red and white bull calf, one year old last June, a perfect model of an animal in every particular—took the premium at the agricultural fair, Philadelphia, 10th Nov. last, for being the best yearling on the ground. Defiance's dam, the celebrated deep milking cow York Belle, g. d. Martha, by Wye Comet; g. g. d. imported Laura, sire Defiance 1st, dam Ruby 2d, g. d. Ruby 1st, sent to Col. Powel by Mr. Whitaker, sire Bertram 2d. Defiance 1st was purchased at Col. Powell's sale 23d April, 1836, then a calf—cost \$270; considered the best calf sold on the day of sale. Price for Defiance 2d, \$300—he is the best calf I have ever seen of his age.

No. 2. Bull Hector, roan, calved Aug. 20, 1836, two years old past, dam Daphne, bought at Col. Powell's sale April 23d, 1836, then a heifer in calf by, it was said, Bertram 2d; he is a very fine bull for his age, and well formed, with very good points—see Herd Book.—Dam's pedigree: a roan, bred by Chas. Barnitz, esq. by Emperor, g. d. Coquette, bred by Col. Powell, g. g. d. Fairy, g. g. d. Prize, g. g. d. Buckingham—price for Hector \$150.

No. 3. Cow York Belle, yellow roan, full bred Durham Cow, 5 years old, dam Martha, bred by Col. Powell by Wye Comet, g. d. imported Laura; sire of York Belle was Mr. Barnitz' splendid bull Emperor. York Belle was purchased at Col. Powell's sale, 23d April, 1836, then a heifer; now in calf by Defiance 1st; bulled June 15, 1838. Price \$250.

No. 4. Vermilion, brindle heifer, 2 years old, dam Lady Delight, the famous butter cow, formerly owned by Col. Powel; Lady Delight produced 19 pounds of butter in one week; sire, a full bred bull kept near R. T. Potts, esq's farm in Montgomery county, bulled by Defiance 1st, 10th May, 1838—price \$200.

No. 5. Bright Eyes, red roan heifer, calved 25th of March, 1838, dam Daphne, by Emperor, g. d. Daphne 1st, g. g. d. Coquette, g. g. d. Fairy, g. g. d. Prize, g. g. d. g. g. d. Buckhorn, sire Defiance 1st—price \$300.

No. 6. May Flower, red and white heifer, calved 1st May, 1838, dam York Belle, g. d. Martha, by Wye Comet, g. g. d. imported Laura, sire Defiance 1st—price \$225.

No. 7. Red Cow, first rate butter cow, said to be full bred, purchased from New York—price \$100.

4 Bakewell Rams, price \$100, \$50, \$30. Each very superior sheep.

Also a first rate milch Cow of the Sims, bread, large black and white pied, 5 years old, in calf by Defiance 1st—price \$100.

The above stock was much admired at our agricultural Fair; they are in fine condition, not over and above loaded with fat, but in fine healthy condition—they are truly worth the attention of some spirited agriculturist.

JOHN BARNEY,

Philadelphia.

jan 15 3t

THE MARYLAND SILK COMPANY OF BALTIMORE

Offers for sale 25,000 genuine *Morus Multicaulis* trees, 20,000 *Alpin*, *Canton*, and other varieties.

d 25

L. J. COX, President.

SPRING CLOVER SEED,

Just received and for sale, by

R. SINCLAIR, Jr. & CO.

FOR SALE,

COLUMBUS, a well bred race horse—his pedigree, which is perfect, will be given. Enquire of no 6 St EDW. P. ROBERTS, Ed. Farm. & Gard.

THE FARMER & GARDENER

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, E. P. ROBERTS AND SAMUEL SANDS—EDITED BY E. P. ROBERTS.

No. 40.

BALTIMORE, MD. JAN. 29, 1839.

Vol. V.

THIS publication is the successor of the late **AMERICAN FARMER** and is published at the office, at the N. W. corner of Baltimore and North streets, over the Patriot office, at two DOLLARS AND FIFTY CENTS per annum, if paid within one month from the time of subscribing, or \$3 if after that time. All letters to be postpaid.

BALTIMORE: TUESDAY, JAN. 29, 1839.

ORANGE FARM.

We refer the reader to the advertisement in another column, offering this fine estate for rent.—We know of no farm of equal size better calculated for carrying on an extensive *dairy* or *piggery*, having on it all the fixtures necessary for either, the land being in the purest state of cultivation, and much of it deep rich loam. Several of the fields are well set in timothy and clover, and yield heavy crops of hay, and nearly the whole of the tillable ground has been recently limed. To an industrious and enterprising farmer, who understands his business, and has the means of carrying on either a *dairy* or *piggery* as it should be, there is no doubt of its proving profitable.

MORUS MULTICAULIS—MORETTI—ALPINE.

We saw some two weeks since a paragraph copied from one of the New York papers, which stated that a large quantity of *Morus Multicaulis* trees had been imported into this country from France and Italy, and that the Moretti and *Alpine* varieties of the Mulberry were preferred in those countries for the purposes of feeding the silk worm. From the circumstance that this paragraph appeared simultaneously with the foreign news, just then received from Europe, it was doubtless concluded, by many readers, that the paragraph was of *European origin*; but such we are sure was not the case, and for this simple and conclusive reason: The *Alpine* mulberry, so called, is not known in Europe by that name, having derived its cognomen from Mr. Whitmarsh, of Northampton, Massachusetts. We have the Moretti, *Alpine*, and *Morus Multicaulis*, and although we esteem each as good kinds, from an experience of many years, we feel justified in saying, that the *Morus Multicaulis* is decidedly best. In quality its leaf is equal to any, while in size it greatly exceeds that of all others, thereby reducing the expense and labor of gathering and feed-

ing. The worms eat it with equal avidity to any other, while they yield as much silk and of as good quality, whether appearance, fineness or strength be considered, as when fed upon any other kind: we believe too, that the *Morus Multicaulis* will afford a greater *acreable* product of foliage than any other sort; it is as *hardy* as the hardiest, when planted upon *high* ground in dry situations; and why such means should be resorted to to depreciate its value, we cannot conceive, unless some insidious or interested motives be lurking at the bottom—motives which are as inconsistent with honesty, as they are with our views of candor and public spirit. We have said that the Moretti and *Alpine* are fine varieties, and we repeat it, and while we would recommend all silk raisers to have a portion of each kind in their orchards, we unhesitatingly declare that, if they consult their *interest*, and *profit* be considered by them an object worthy of consideration, they must *mainly depend upon the Morus Multicaulis* for feeding, as it saves at least 50 per cent. of the expense.—We conclude by repeating that it is a *hardy* shrub, and that frost cannot kill it if it be allowed a fair chance for its life.

THE TIDE WATER CANAL.

We have read with attention the memorial of a committee of the Directors of this public work, praying of the Mayor and City Council of Baltimore the loan of the City's credit for a million of dollars, to enable the company to complete it.—And we must in all candor say, that we have not, for a long time, perused a document of more force and power. Its statements are clear and perspicuous; its premises just and well grounded, while its deductions are such as to meet the approbation of every reader. In fine, it is obvious to all, that its author was master of his subject, and writing with a disciplined mind, and a heart imbued with zeal, has very happily communicated his own well digested thoughts in a language which none but the wilfully ignorant can misunderstand. The completion of this work, in a national point of view, we consider of the very first importance, as it opens a continuous communication between the waters of the Atlantic and those of the valley of the Ohio and the lakes, as well as with the valley of the Susquehanna.—

Indeed, it may be considered as the most eligible outlet to market for the produce not only of the country designated above, but for a very large portion of the western and south-western states. No one can read the facts communicated by its well informed and able author, but must come to the irresistible conclusion, that the *Tide Water Canal*, when completed, will become one of the most profitable public works in the country. To the city of Baltimore it will prove of incalculable value, and we sincerely hope, that our city authorities will not hesitate a moment in granting the aid prayed for, as, while the granting of it will impose no positive burthens upon the citizens, it will secure to them advantages which are beyond all price.

ANCIENT SILK CULTURE IN AMERICA.

In looking over an old work printed in London in 1775, we met with the following fact:

"It is a truth," says the writer, "that about 10,000 lbs. of cocoons was, in August 1771, sold at the public filature in Philadelphia, and that the silk produced from the native worm is of good quality, and has been much approved of in this city."

We insert the following with unmingled feelings of pleasure, and sincerely think that those patriotic gentlemen—Messrs. Jenks & Ramsburg—deserve the thanks of the community in which they live, and to whose citizens their good example will, we are sure, prove a lasting benefit.

Silk Stockings.—We have been shown a specimen of a pair of fine silk stockings made of the raw silk raised by Messrs. Jenks & Ramsburg of Frederick, during the past season. It is with unwonted pleasure that we note this demonstrative evidence of the possibility of propagating to advantage the Mulberry and silk raising in this vicinity. The fineness of the material, the beauty of its color and texture, and its softness and elegance, are only exceeded by the superiority of the workmanship which has converted it into so even and elegant an article. Dr. Jenks might boast of his silk, but certainly Mr. Ramsburg has more cause to exult on account also of the beautiful domestic workmanship which has been exhibited in its fabrication.—*Fred. Herald.*

GAY'S SILK MACHINERY.

We copy with pleasure the following notice of the machinery of this accomplished machinist, and hope he will find in the American people not only the gratitude to acknowledge his strong

claims upon their patronage, but enterprise sufficient to reward him for the toils he has encountered, and the skill and ingenuity displayed in perfecting his machinery.

Communicated for the Baltimore Patriot.

MR. GAY'S SILK MACHINERY.

MR. EDITOR: There can now be no doubt, but that the culture of Silk is destined soon to become one of the most profitable branches of national industry. Enquiry is aroused and interest awakened. A spirit of earnest adventure has gone forth among the people, and nothing now, short of another revolution, can put it down. Its march is onward.

We have every advantage, both as to the culture and manufacture of Silk. The soil and climate, of the greater number of our States, are as well adapted as those of any country on the globe.

We have already made the attempt and succeeded, both in the culture and manufacture. Mr. Gay exhibited to me, in the State of Delaware, some wove silk for ladies' dresses, and some handkerchiefs, as beautiful as any that ever came from the looms of China, Italy or France. In solidity they are superior to almost any of the imported article.

Mr. Gay, the ingenious inventor of the silk machinery exhibited in this city, is, I have been told, originally from Connecticut, the land of industry and ingenuity, and richly deserves, with some other States, to be styled the *Universal Yankee Nation*. Mr. Gay was a pioneer in the silk business, and with slender means he early applied himself to the study of the silk culture, and to the perfection of silk machinery. After hard struggling, he put in operation the discoveries and improvements he had made, and has now given to the world his machines for unwinding or reeling cocoons, and for making sewing silk. I have seen this machinery operate, and pronounce it, as far as my judgment goes, almost perfect. It is as simple as it can be to act properly, and yet it has every thing necessary. The traversing bar of the machine which unwinds the cocoons, is moved by a simple groove in a wheel, whereas in the Piedmontese reel, two or three wheels are required to move the bar. Mr. Gay's machine saves a vast deal of trouble. Instead of taking the silk from the cocoons to the reel, and then from the reel to the spools, this machine takes it immediately from the cocoons to the spools, thereby saving more than half the trouble and time. In his machine which doubles and twists the thread, I noticed a peculiar wheel, intended to lower and elevate alternately the spindles, so as to spread the silk on the spools. It is in the shape of a heart, and I am told that a wheel of no other shape would answer, which from my knowledge of the science of Mechanics, I know to be true. Mr. Gay has discovered a substance, that when put on the silk, will render it compact and prevent the fibres from separating when running over a surface, and from sticking to a reel.

The machinery of Mr. Gay has been exhibited and admired in Connecticut, Rhode Island, New York, Pennsylvania, and elsewhere. It is now operating in several of those States. I am told that Mr. Gay has received orders for his machinery in the District of Columbia from several persons.

Farmers come forward! With Mr. Gay's machinery your daughters in a few days, nay in a few hours, may learn to make as good sewing silk as any from Italy, and sewing silk is worth from ten to twelve dollars per pound. Farmers, come forth like men, and the poor worn out fields around you, will yield silver and gold as pure as those you now cultivate with so much toil and expense in corn. Put those old fields in Mulberry, and with Mr. GAY's machinery you may reap in three months, far more than you do in the whole year, and this may be done by your daughters and small children. They may walk in purple and fine silk; and that of their own manufacture too, for in these machines of Mr. Gay, you may twist it ready for your loom. By the by, I had forgotten to mention that Mr. Gay was the man who applied the Power Loom to weaving silk, a thing which was declared to be impossible. Without flattery, I believe he has done, and is now doing, more for the silk cause in our country than any other man. In his experiments and improvements he stops not at expense. I have understood, that he has expended fifteen thousand dollars in bringing his machinery to its present state. May his exertions for the public good be richly rewarded, and unlike the inventor of the Cotton Gin, may he never need a penny. How vast is the benefit derived from one machine like the Cotton Gin or Gay's Silk Winder and Twister! The people are not aware how much they are indebted to such men as Gay and Whitney. Their monuments may truly be said to be more lasting than brass or marble—they must endure while industry has a name or society exists.

EXAMINER.

American Hotel, Pratt Street.

We copy with feelings of unmixed pleasure the following notices of a new *periodical* about to be established in our city, under the auspices of the National Silk Society, the which will be edited by our townsman John S. Skinner, Esq., a gentleman well known to the American public, and who, we will take this occasion to say, is eminently qualified for the task, and that although he may not be able to "succeed in demonstrating that Silk and Mulberry trees are the only legitimate objects of man's labors and desires," *will be able to demonstrate*, what is infinitely more important to the interests of the country—that the Silk culture is calculated to add to individual and public wealth—that it will give employment to the industrious, and open the way to competency, to thousands who are now lingering out lives of penury and want.

[From the Chronicle.]

The New York Commercial Advertiser notices in the following terms an enterprise which is about to be set on foot in our city. Mr. Skinner is as well fitted as any one we know, for the management of a paper of this sort. Mr. Skinner has a genius for these things, and will, no doubt, succeed in demonstrating that Silk and Mulberry trees are the only legitimate objects of man's labors and desires:

SILK.

The prevalent rage for mulberry trees, silk worms, and the matters thereto appertaining, has extended, we perceive, to our industrious and able friend, Mr. Skinner, of Baltimore, well known to sporting men as the editor of the *Sporting Magazine*, and to every body else as the attentive and obliging postmaster of the monumental city. He is about to assume the editorial conduct of the "Journal of the American Silk Society, and Rural Economist"—an association formed in Baltimore last month, under whose auspices the Journal aforesaid is to be published. It is to be published monthly, each number containing thirty-two pages at two dollars per annum. Although silk is to be the staple of its contents, a reasonable share of the editor's attention will be given to the cognate subjects of agriculture, horticulture, and rural and domestic economy; for the skilful dealing with which he is abundantly qualified by taste, knowledge and experience. The great and patriotic cause of silk will have in the new Journal an able and efficient coadjutor; and we have no doubt that in time the "genuine morus multicaulis" will become as costly as pure gold, or the sparkling gems of Golconda. The price of silk also, we understand, is rising rapidly.

AMERICAN SILK.

The signs are most auspicious that we are about to make a very important addition to the number and value of the products of American Industry, by adding *Silk* to the list of our staples. As a measure tending to embody and diffuse widely and most efficiently all information to be gathered on the growth and manufacture of silk, from the best sources at home and abroad, the late Convention at Baltimore unanimously recommended the establishment of a Journal to be devoted to these objects; and happily, as we think, for the success and usefulness of the measure, they have solicited Mr. Skinner, the founder of the *American Farmer*, and of the *Turf Register*, to become the editor of this national work. A portion of the Silk Journal, which is to consist of thirty-two pages monthly, will be set apart for the kindred subjects of agriculture, horticulture, and rural economy. The price is \$2 per annum. Mr. Skinner, expressing his conviction that the culture of silk is destined to be, and that speedily, an object of profitable employment for much of the now unproductive laboring capacity of the country, and to add very largely to the wealth of the nation, has accepted the invitation of the Society to conduct the Journal with all his ability and attention, "consistently with a strict discharge of his official duties" as postmaster. The first number will appear in the course of the present month.

Another striking sign of the success of the silk culture is the offer of a wealthy house of Glasgow, in Scotland, to establish in Virginia a manufactory which shall demand annually \$100,000 worth of raw silk.—*Nat. Intelligencer*.

There was a fine display of stock of all kinds at the Agricultural Show at Frankfort, Ken., last week. Only one animal was sold before the crowd had to disperse on account of a heavy rain—that was a Jack, and he brought \$1200 at auction.

Through the politeness of a friend, we are favored with a partial view of the proceedings of the Silk Convention which met at Annapolis, on the 15th, agreeably to previous notice—with the expectation of a more extended detail in our next. The Representative Chamber being politely offered for their accommodation, at 7 o'clock, P. M., when assembled, Judge Chambers was called to the Chair, and Dr. Cloud appointed Secretary.—Thus duly organized, Mr. G. B. Smith was called on, and gave many gratifying details from practical experience, in relation to all the various branches of the Silk culture, when the Convention adjourned to meet the following evening, at the same place and hour, at which time business of much importance to the cause was transacted, and the Convention again adjourned to meet the following day, at 10 o'clock, A. M. in the Court House. During the morning, the Convention having effected all the objects of its call, was dissolved, and most of the persons present formed themselves into a State Society, formed a constitution, &c., and appointed the following gentlemen as officers thereof:—*Easton Gaz.*

E. F. CHAMBERS, President.

Judge HOPPER, } Vice Do.

Dr. CLOUD, }

G. B. SMITH, Cor. Sec'y.

J. O. LAW, Rec. Sec'y.

L. J. COX, Treasurer.

Executive Committee.

James Murray, of Annapolis.

Wm. H. Tilghman, of Talbot.

John McFeely, of Queen Anne's.

Dr. Thomas C. Kennard, of Kent.

Henry Hollingsworth, of Cecil.

Dr. Wm. D. Jenks, of Frederick.

Dr. Geo. T. Martin, of Caroline.

James L. Shelden, of Carroll.

Edward P. Roberts, of Baltimore.

RALEIGH SILK SOCIETY.

An Association, bearing this title, was organized in Raleigh, on the 26th ult. under the provisions of an act of the North Carolina Assembly, passed at the session of 1836-'37, "to encourage the manufacture of silk in this state."

The following officers were chosen for the ensuing year, viz:

Weston R. Gales, President.

Charles Dewy, Treasurer.

Edmund B. Freeman, Secretary.

Albert B. Smith, }

Nelson B. Hughes, } Directors.

James McKimmon, }

The Raleigh Register says—"This Society has been formed, not only with the hope of its proving a source of profit to the shareholders, but for the purpose of diffusing information on the subject of the Silk Culture throughout the State, and of encouraging our people to engage in the business."

REGIMEN FOR A WIND BROKEN HORSE.

This disease is caused by overfeeding, by violent exercise when the horse is too full, or by letting the horse go into water when he is hot and sweaty: or it frequently originates from an obstinate cold not well cured. The only remedy we have known to prove efficient, is to feed a horse

with good, healthy food, corn and not much hay; or feed him upon potatoes, and whenever water is given him, it should be impregnated with saltpetre and sal-amoniac.

Lime water freely given has in many instances cured this disease. We know one instance where a wind broken horse had been kept in a field where there was not any water except in the bottom of an old lime kiln, and had recovered his wind. The horse got no other water to drink for five or six weeks, and he perfectly recovered his wind, and continues free from cough.

We cut the above from the South Carolinian, where it did not appear as original; but as the credit is not annexed, we cannot give it.

In addition to the above prescription, which we doubt not is a good one, we will remark, that in a conversation with an old gentleman some days since, who though not a horse farrier, has great skill in the treatment of the diseases of horses; he assured us that he had cured several *broken winded* horses in the following manner.

He placed them in the stable, gave them no hay; but little water, and that in small quantities at a time. Their feed was ground oats, or meal, in portions of a quart six times a day for two or three weeks, after which the quantity was gradually increased, until at the expiration of six weeks, when their daily allowance was equal to three gallons. During the first week, every other day, he mixed a dose of flour of sulphur in the food: after that time up to the termination of the third week, he gave daily 1 oz. of pulverized rosin, and 3 oz. of ground ginger, dividing this mixture between the several daily feeds. In this way he assured us that he had cured several horses which had for a long time been laboring under the disease that had been pronounced incurable.

After the sixth week the animals may, he said, be allowed hay, in small quantities at first, and their usual quantities of water. Having every confidence in our informant, we give his receipt and recommend it to the reader.

We forgot to add in the proper place, that once a week, the first three weeks, he gave 1 oz. of saltpetre.

Cumberland Ford, Ky. Jan. 2, 1839.

DEAR SIR:—As I have been accustomed for some years past, to give you a list of stock passing this place for Market, I again submit to you, below, a list for the past year, with a calculation of the probable value in market. There has passed,

4639 Horses, } probable value in

3177 Mules, } market, \$577,280

68764 Hogs do do do 962,696

4549 Beef cattle do do do 227,450

3250 Sheep do do do 13,000

Total amount 1,780,426

A very handsome sum per annum to be brought

through this one mountainous channel into our State. This sum discounted at 4 per cent. (which is perhaps an average loss sustained on Southern paper,) then our speculators must lose \$71,217. I think to save this sum to the enterprising, the Legislature of Ky. should grant a charter to the Charleston and Cincinnati Rail Road Bank. It surely would have a tendency to produce an equilibrium in the currency, which would be of vast importance to the enterprising citizens of Ky.

Very respectfully,

your ob't, servant,

JAMES RENFRO.

WATERING CATTLE IN WINTER.

Perhaps it would excite the surprise of many of our readers, should we assert, that cattle suffer more from thirst in winter than during the heat of summer. Yet there is strong reason to believe this is the case to a great extent. Cattle whose food consists entirely of hay, straw, and other dry materials, need a frequent and plentiful supply of pure fresh water. This many do not obtain, as nearly all streams are covered with ice, and cattle are obliged to wander a considerable distance from the yard to a watering place, through deep snows, or over a slippery path, exposed to the annoyance of dogs, or to be gored by other cattle, and rather than endure this, they often suffer much from a want of water. It has been ascertained that a bullock, which has water at command, will drink eight times a day. It should therefore be of easy access to cattle at all times, and not on a distant part of the farm, or in the open road, so that in order that cattle may help themselves to it, you are obliged to have your gate open, or barn yard bars down, and thus your yard is thronged with vagrant colts and other ill-bred animals, who take possession of whatever fodder they can lay their mouths upon, and pay no regard to the rights of *meum* or *tuum*.—Dr. Anderson says that he knew a man who became a very rich man by being *great* in *little* matters, that is, in taking care of *little* things, which others consider of too little consequence to claim their attention: and this man always made it a point to see that his cattle, particularly his milch cows, should have a constant supply of the purest water.

CUT FODDER. Cut as chaff your hay, straw, corn-tops or blades, and even your stocks with a straw cutter, and you will save a great proportion which is otherwise wasted or passed through the animal without contributing to its nourishment. One bushel of chopped hay at a mess, given in a trough, three times in twenty-four hours, is sufficient for a horse, ox, or a cow. A bushel of chopped hay, lightly pressed down, weighs from five to five and a half pounds. A horse or horned beast thrives more on fifteen pounds thus given, than on twenty-four or twenty-five pounds as commonly expended (including waste) in the usual mode of feeding in racks; to which troughs properly constructed, are far preferable.

Feeding your stock by weight and measure of food, will not only save your provender, by its orderly distribution, but frequently save the lives of animals, too often starved by niggardliness or gorged and injured by profusion. If it be true, as it is said, that "the eyes of the master makes the horse fat," it is equally so that the master's eye prevents the horse from being pampered, wantonly

bloated, foundered, and finally wind-broken and blind.

Cows.—Keep no more cows than you can keep well; one well fed will produce as much milk as two indifferently treated, and more butter; and if the cow be wintered badly, she will hardly recover during the succeeding Summer, so as to become profitable to the feeder. Cows should by all means, be protected from cold weather and severe storms, particularly those which give milk, or a failure in the quantity of milk will be the consequence. Therefore instead of keeping twenty cows poorly fed, but half of them stabled, sell ten and give to the remaining ten the amount of feed equal to that consumed by the twenty—procure constant stabling for them, and you will receive quite as much milk and butter in return, as was derived by the former mode from the twenty.—Sugar beet, carrots, pumpkins, and ground oats are unquestionably among the best of food for milk cows; the sugar beet occasions the milk to assume a fine flavor and color as well as an increase in quantity over any other kind of food.—*Yankee Farm.*

QUICK-LIME

And other calcareous substances as a Manure.

It is even, on some occasions, more advisable for those who have very sandy lime, to drive it in the state of powdered lime than in that of shells: for, as it is dangerous to give that kind of lime-stone too much heat, lest it should be vitrified, those who burn it can never be certain that the whole of the stone will fall to powder when water is added, till they have actually tried it; nor do they think it a great loss if some part of it should be imperfectly burned, as it required much less fuel on a future occasion than fresh lime-stone; and therefore they much rather choose to err on this, than on the opposite extreme.

But, should any one attempt to drive this poor sort of lime in the state of shells, he would be in danger of carrying home many stones that would never fall, which would more than counterbalance the benefit he would derive from the want of the small quantity of water that is required to slake it.

On these accounts, it may be admitted as a general rule, that those who can have access to lime-stone which is free of sand, will save a great deal in the carriage of it, by driving it in the state of shells; and that on the contrary, it will be most economical in those who can only get lime of a very sandy quality, to drive it in the state of powdered lime.

From hence it follows, that the practice which now prevails, of carrying shell-lime by water from one part of the country to another, is only an imaginary saving, obtained at a very high risk, to those who drive shells of a sandy quality; but a real and unequivocal advantage, of very high importance to the community at large if these shells are obtained from a pure lime-stone.

These observations relate only to the saving of carriage to the farmer; an article of capital importance to him. It is proper now to take notice of some other particulars that may equally affect him in this way, as well as in the application of the lime to his ground.

A vague opinion, in general, prevails in every part of the country, that one sort of lime may be more valuable than another; but it does not ap-

pear that farmers have hitherto had almost any rule to direct them in the choice of different sorts of lime; some esteeming one sort *strongest*, as they term it, and some valuing another sort more highly, without being able to assign any satisfactory reason for the preference they give, in either case.

It is of importance, that this matter should be elucidated.

Although it does not always happen, yet, in many parts of the country, the real nature of lime is so little understood, that the weightiest lime is preferred, as a manure, to that which is lighter; because it is imagined the first has more *substance*, and will therefore produce a more powerful effect upon ground, than the finest and lightest lime.

But, there seems to be no reason to think, there is any difference in the specific gravity of different parcels of pure calcareous matter, when fully calcined; therefore, if there is any difference in the weight of various sorts of lime, it must arise entirely from a variation in the quantity or gravity of some extraneous matter that is mixed with the lime.

And as sand is almost the only extraneous body that is ever found in lime-stone, and is always of much greater specific gravity than pure quick-lime,—it follows, that the weighty lime only owes its superior gravity to a larger proportion of sand that is mixed with it.

But sand is of no value as a manure; so that he who voluntarily purchases this kind of lime, in preference to the other, is guilty of a great degree of folly; which will be the greater, if he has likewise to drive it from a considerable distance. It would be better for him if he is determined to use nothing but weighty lime, to buy such as is pure, if it can be obtained, and mix it with sand after he has got it home, so as to give it the gravity required.—Some might laugh at this, as a proof of his folly, and justly: but, it is, surely, less foolish in him to do this, than to pay money for the sand which he would thus obtain for nothing and drive it from a distance, when he might have it at his door. This practice would also be attended with the farther advantage of enabling him to know exactly, what quantity of *real* lime he applied to his ground, as he would not be in danger of considering the sand as a part of it.—*ib.*

GREAT CROPS OF RUTA BAGA.

We have often made the assertion, that in no way could so much food for stock be obtained from a single acre of land, as by the cultivation of roots—such as Ruta Baga, Mangel Wurtzel, Sugar Beet, &c. We think ourselves very well paid for our labor if we obtain a ton of hay from that amount of land—better paid if we get two tons,—and have done uncommon great things should we get three. But by cultivating roots properly, we can increase the amount of cattle-food in a ten-fold ratio.

Mr. Nathan Foster, of Winthrop, informed us, the other day, that he gathered from a single quarter of an acre, 245 bushels of Ruta Baga. This crop was taken from land that had been cultivated with this crop for several successive years. This is 1080 bushels per acre, and allowing 54 lbs. to the bushel, it makes more than 84½ tons to the acre. Now we are aware that there are various opinions in regard to the nutritive powers of Ruta

Baga, but from our own limited experience, and from the more extensive experience of others, we do know that a ton of Ruta Baga and a ton of hay is better for cows and young stock than two tons of hay alone will be.

GREATER CROP YET. Since writing the above, we have been informed by Mr. Isaac Bowles, of Winthrop, that he has actually raised and gathered this season 1120 bushels of Ruta Baga from one acre of land.

Now this crop, allowing 64 lbs. to the bushel, will make more than 35½ tons to the acre. Mr. Bowles planted them on land which had been highly manured a year or two ago, and on which he raised his great crop of corn. His mode of planting them was as follows. He took a light piece of wood of suitable size and length, and bored holes in it twenty inches apart. Into each hole he put a pole and fastened it in. On the end of each he tied a brick bat. Two men dragged this instrument, back and forth, and thus made furrows or drills; while himself and a young hand followed after and scattered in the seed. He then passed a heavy roller over it, and the work was done.—*Yankee Farmer.*

SOWING GRASS SEEDS.

It is a bad system to mix seeds of different plants before sowing them, in order to have fewer casts. It is better to sow each sort separately, as the trouble of going several times over the ground is nothing compared to the benefit of having each sort equally distributed.

Grass seeds cannot well be sown too plentifully, and no economy less deserving the name can possibly exist, than the being sparing of grass seeds. The seeds of grain may easily be sown too thickly, but with respect to those of grass, it is scarcely capable of occurring. The smaller the stem, the more acceptable it is to cattle; and when the seeds of some grasses are thinly scattered, their stems tend, as it is called, to wood, and the crop is liable to be infested with weeds. Some think that if ground is well manured, good grasses will come in of themselves. Perhaps so; but how long will it be before that happens! Clean seed, and that which is known to be suitable to the soil, should always be sown. For though grasses will gradually come in, no great crop is to be expected the first year, unless it be a crop of rank and useless weeds. And he that misses the first year's crop, loses much, as the longer the land lies, the more compact or bound it will become, and produce the smaller crops.

Every farmer should carefully examine his fields that are coming into grass for next summer's mowing, and carefully note all the bald spots, where, by the lodging of grain or from any other cause, the grass roots have either not taken or been destroyed. On all such spots grass seeds should be applied at as early a period in the spring as possible. Failures of this sort generally are found where the soil is strongest, and if grass seed is not resown, there will be an abundant supply of weeds to annoy the careless farmer.

Farmers' Cabinet.

AGRICULTURAL.

A correspondent of the American, who visited Washington county, speaks very favorably of a field of wheat which he saw there. The soil was

alike throughout, heavy clay limestone: no manure had been applied, until early in the spring, a top dressing had been given to about two-thirds of the field, (containing in all 24 acres) with two bushels of plaster to the acre. The dressing was applied to the extremes, and the centre third of the field was left, without dressing. From the appearance of the growing crop of wheat, Mr. MEIXEL, the correspondent, gave it as his opinion that the portions on which the plaster was applied, would yield about 23 bushels, while the other portion would not probably produce more than 15 bushels, to the acre. And this opinion, he says, was afterwards borne out by the fact.—The circumstance is mentioned, to the end that others may profit by this "experiment," of a top-dressing of plaster on wheat fields.

LIME FOR WHEAT.

In most all parts of New England, especially on old lands, lime is an excellent manure for wheat; so it is in all other sections of the country, where lime does not constitute a part of the soil. On many farms good crops of wheat cannot be raised without it. Some farmers will probably find it more convenient to procure their lime in the winter, as the spring is a busy season, and in some parts of the country the travelling will be bad till after the season for sowing.

It is not necessary to have fresh burned lime for this purpose, as is the case when it is used for plastering or cement. By articles on lime which we have published within a few months, it will be perceived that quick-lime, which has lost its fixed air (carbonic acid) by calcination, must remain some time exposed to the atmosphere or covered in earth, before it imbibes this principle and becomes a good manure. It is then restored to its original state, only it is finely powdered instead of being solid; it is like powdered limestone. The fixed air, which usually constitutes 40 or 50 per cent. of limestone, is an important principle in plants, and lime that has lost it, again imbibe it before it is fit for agricultural purposes. This accounts for fresh lime, used as a manure, often having but little effect the first year, and for lime applied to the soil in the fall having a greater effect on the next crop than if applied in the spring. We make these remarks as many farmers would put themselves to inconvenience for the sake of obtaining fresh burned lime in the spring, when according to the best authorities, founded on the principles of science, it is not so good for manure as old lime.—*Yankee Farmer.*

MANUFACTURE OF BEET SUGAR.

We have in previous numbers given some information on the raising, and preserving the beets; we will now introduce some remarks on the manufacture of Sugar, from the Maine Farmer; which gives the clearest and most distinct idea, of the process as applicable to home manufacture, that we have seen in so few words. Although the fixtures for drying the roots, are not in operation with us, yet the farmer may easily contrive some simple apparatus that will answer equally as well. Great improvements appear to have been made in the mode of manufacture, within a few years, at least the business has been much simplified; and the new process of drying the roots, does away the necessity of preparing cellars for their preser-

vation during the winter, and will enable the farmer to put off the manufacture until winter, when he is not so much drove with business,—the process of drying having been performed previous to the commencement of freezing weather. But we will cut short preface and give the article itself, hoping our farmers may be stimulated to make a trial of the business.

Gallatin (Ten.) Union.

Much inquiry has been made about the process of making sugar from the beet. We do not profess to fully understand the whole proceedings, but according to the latest discoveries with which we are acquainted, it appears that slicing and drying the beet, and then grinding it to powder, and steeping this powder in boiling water to which it readily yields its saccharine matter, constitutes all that is peculiar to its manufacture. The remainder of the process is precisely the same as that of making sugar from the sap of the maple tree.

Nearly every article of machinery necessary for forming this operation on a large scale, is already made and in use among us. All that is wanting is to bring them together and apply them to this use. In the first place, a machine is wanted to slice up the beets—and you have it in the Straw Cutter invented, *but not patented*, by our worthy fellow citizen, Dr. E. HOLMES. By making very trifling alterations in this machine, a man will be able to slice 100 bushels a day, without excessive labor. The cost of the machine will not probably exceed ten or twelve dollars.

The hop houses that are already built in many parts of our State, will answer admirably well for drying the beets after they are sliced. Spread them upon the cloths much in the manner that you would hops. Build in one corner of the lower part a surface, and set a boiler for extracting the saccharine matter, and boiling down the sirup,—and let the smoke and steam be conducted through funnels along under the flooring on which the beets are spread to dry; and in this way the same fire that makes the sugar will dry the beets. In the other corner set a mill, similar to those used by tanners for grinding bark; or one of the horse power grist mills may be found preferable. To either of which the common horse power can be attached, and the grinding performed with ease and facility. Thus you have the whole appendage for a sugar manufactory.

At present, one manufactory of this kind will answer for a School District, or even a whole Town; but the time is not far distant when we shall find one, on a plan something like this, on every third or fourth farm of any magnitude in our State.

The pulp, after having been steeped, may be again dried, and kept for feeding cattle and store hogs thro, the winter—for which purpose it is said to be as valuable, pound for pound, as oatmeal, either used alone, or mixed with boiled or steamed potatoes.—This business is yet in its infancy, and, as it advances, improvements will continue to be made in the process of manufacturing the sugar, and new and valuable uses will be found for the pulp.

What hinders our farmers from embarking in this business? It cannot be the want of soil or climate suited to its culture. The former we have, that is second to none in the world, and the beet

grows in so short a time that even our coldest seasons will produce energy or industry; all these the farmers of Maine possess in an eminent degree. It must be mainly attributed to a want of information, which however, we believe has already been given through our agricultural newspapers sufficient to enable any one to commence on a small scale. Let three or four of our best farmers in each town commence with a quarter of an acre of beets, and shew to their neighbors that it will yield them a nett profit of one hundred dollars per acre for the use of their land, and it will not be many years before the importation of sugar into this State will cease.

ANIMALCULÆ.

Professor Hitchcock, in a letter presenting some geological facts respecting certain regions in the western parts of Massachusetts, adds the present interesting postscript.

'Some of your readers may be gratified if I mention a discovery of some scientific interest, which I have made within a few days past; they have all, doubtless, heard of those minute living beings discovered by the microscope in stagnant water, &c., and called *animalculæ*, millions of which live in a single drop. But until very recently, who would have supposed it possible that the skeletons of these animals would be found preserved in the soils and the rocks! Yet there is a white and light substance, very common in Massachusetts, beneath the mud and swamps, which I find to be full of these fossil skeletons! And it is curious that if care be taken in placing the substance beneath the microscope, these skeletons will generally be found to be entire, although so thin that the light passes through them so as to render them almost invisible. The only species I have noticed has the shape of the common *angel worm* or *earth worm*, and it would take hundreds of thousands of them, probably millions, to take up a cubic inch. Yet the deposit that contains them is probably two-thirds composed of their remains, and in many places it forms a stratum several feet thick, covering many acres, and may be found, I doubt not, in every town in the State. I happened to have specimens only from Andover, Bridgewater, Barre, and Pelham, all of which contain the relics.

'In Europe it has recently been found that several rocks of considerable thickness (among which are flint and opal) are made up chiefly of animalculæ. Indeed, the famous Prussian naturalist, Ehrenberg, has determined twenty-eight fossil species, nine of which are extinct, and the others correspond to the living species. Of these is the *polishing slate*, (a variety of rotten stone.) Ehrenberg says—'About 23,000,000 of these creatures would make up a cubic inch, and in a cubic inch there would be 41,000,000 weighing 220 grains; the silicious shield of each animalculæ weighs about the 187,000,000th part of a grain. The fossil animalculæ of the iron ochre is only the twenty-first part of the thickness of a human hair; and one cubic in this ochre must contain *one million* of skeletons of living beings.'

TOBACCO TRADE.

This trade is now in an interesting position, caused by the shortness of the crop in Virginia

and Kentucky, where the heavy descriptions are grown. The crop in Virginia, which last year reached about 45,000 hhds. will this year be 25,000 hhds. at most. Of this, we learn from some of the heaviest manufacturers, that not more than 10,000 hhds. will be passed, the balance lugs. This affords but a very small proportion for the use of manufacturers. The question then naturally arises, will the rates of the manufactured article, in the course of the next season, reach a grade which will warrant a continuance of manufacture at the present and prospective value of leaf? This question is doubly important at this time, as the period is approaching, when those engaged in the manufacturing form their arrangements for the year. Having formed the contract, it becomes a matter of necessity to continue their operations, otherwise, the "keep" of ten negroes becomes a dead loss. Now, therefore, the question arises, does the prospect of prices warrant the renewal of these engagements for the coming year. In the opinion of many of the principal men in this business, whose letters we have seen, it will not. A number of them are determined to enter into no new engagement, and others to the extent of one half only. As the rate at which manufactured tobacco can be afforded depends entirely upon the price of leaf, we will look on prices current, in Liverpool, to the year 1814, when it was at a much higher point than has since been attained.

For this purpose, we will take the quantities exported each year from the U. S; and as England uniformly consumes about one quarter of the whole export, we will also take that consumed in the United Kingdom, for the corresponding years—and for shortness, we will take, as a criterion, the prices of Virginia bonded tobacco, remarking that the prices given are for April of each year.

Exports from U. S.	Cons'mp. in G. B.	Price Va. in bd.
1814, 3,125 hhds.	10,502,917 lbs.	22d a 26d
1815, 8,500	13,107,192	12 a 28
1816, 69,000	12,815,808	10 a 17
1817, 68,000	13,593,089	7 a 13
1818, 34,000	13,688,437	9 a 14
1819, 69,000	12,911,235	5½ a 11
1820, 34,000	13,016,532	5 a 10½
1821, 66,000	12,983,198	2½ a 7
1822, 8,300	12,970,566	— —
1823, 99,000	13,418,554	8 a 8
1824, 77,000	13,783,694	2½ a 7½
1825, 75,000	14,510,555	2 1-8 a 7½
1826, 64,000	13,783,376	3 3-4 a 9
1827, 100,000	14,704,655	3 a 7
1828, 96,000	14,540,368	2 a 6
1829, 77,000	14,760,468	3 7-8 a 7½
1830, 88,000	15,170,719	2½ a 6½
1831, 36,000	15,950,018	2½ a 6
1832, 106,000	15,892,792	2½ a 6
1833, 38,000	16,214,159	2½ a 6½
1834, 87,000	20,626,800	3 a 7
1835, 94,000	23,588,000	3½ a 8
1836, 89,000	22,722,000	2½ a 8
1837, 100,000	20,723,000	2 a 8
1838, ———	15,542,250	Oct. 1, 2½ a 8½

From this state it appears that in 1816, when the export from the United States was larger than it will be this year, at the utmost extent, prices were four times as high as they were in April last, although the yearly consumption in Great Britain

was a little more than half the quantity which was consumed in 1837; which as compared with those of the commencement of the year, were as follows:

	1838.	Oct. 2
Jan. 1,—Virginia sound,	4d a 5d	— a 6d
do. good fine,	5½ a 6	— a 8
do. stdm. sound,	5 a 7½	6½ a 8

This large advance was predicated and rumored on the scarcity of the crop; when this shall have been confirmed, the advance will no doubt warrant our position of a range of prices nearly equal to those of the year immediately succeeding the war.

Furthermore, although the above table shows for 1837, a larger export than has occurred for the previous year, yet the stocks in both Great Britain and Europe are notoriously reduced, which is an evidence that even last year's crop was unequal to the increased consumption. The stock in bond in Great Britain on the 16th ult. was 15,214 hhds. against 20,370 same time last year. This is a great deficiency when we consider that the supply is cut off one-half. From these data we are of opinion that prices next season will range very near those of 1816. That they will go much higher than present rates is certain. So prevalent is this opinion, that an active speculative demand has sprung up, both in England and in this city, and also the trade in England, at our latest dates, had commenced buying with great vigor.—Their stocks had become very much reduced, by reason of their holding back under the expectation that the crop would turn out well. This was an additional impulse to the advancing prices.

The rates for leaf tobacco in Virginia have already reached a point which leaves no margin for manufacturers, even at the highest rates at which sales of the manufactured article have been made. Taking into view, therefore, the smallness of the crop, the Virginia operators anticipate a better business by laying over one year, and holding on to their present stock, than to manufacture at present loss, in the hope of future ruin.—*N. Y. Herald.*

From the Cultivator.

LIVE FENCES OF THE WILLOW.

Judge Buel—Dear Sir—I do not recollect to have seen any thing said in regard to live fences made out of yellow willow. If any thing in the following is worthy your notice, or likely to be of advantage to the numerous readers of your excellent paper, you may use it to the best advantage. In our region—say the counties of Frederick, Clark, Warren, Page, and Shenandoah—there are many miles of live fence, especially upon the banks of the north and south branches of the Potomac River, made of the yellow willow. In the month of March they are cut down and trimmed with an axe, say eight or nine feet long, so that cattle cannot well reach the tops, and trim them, in which case they do not live well. However, they are planted at most seasons of the year, though the spring is preferable. All sizes are planted. At other seasons, when the waters are low, we do not plant so close. About the size of a man's wrist is the best size to live well, but they are often much larger, as well as smaller, and do well. They are generally planted three or four feet apart—the large end of the limb, branch

or plant, being cut sharp, ready to force in the ground, which is done by means of a Jackson, (as some call it,) made of tough oak, gum, or locust, to drive in the ground, say eighteen inches or two feet. This Jackson, as it is called, has a pin through the top an inch from the socket at the bottom. It is best, perhaps, to have several sizes to suit the limbs. After the Jackson has been drawn, the plants should be pushed down in the hole firm. Two or three hands will make a long string of fence in a day by having two good mauls. The hole is made in less than a minute. After the willows are set, it is best to plant in brush of some kind; if you do not, and water should get high soon after planting, they will not stand so well; and another advantage in planting in brush, is, sediment and trash settling in behind the willows, make them stand firm and grow more rapidly. However, some few plant, and leave them several years; then cut off the tops and plant the fence, which is not a good way. A live fence in this way is ready for use as soon as it is planted. We have taken a great many rails and firewood off of those fences when they get ten or a dozen years old, the growth on water is so quick.

I remain, dear sir, your most obedient servant,

SAMUEL M. SPINGLES.

White Hall, Va., Sept. 28, 1838.

FRESH SUPPLY OF FIELD AND GARDEN SEEDS,

BY THOMAS DENNY, Ellicott near Pratt street, Baltimore, who has just received general supply of GARDEN SEEDS, the growth of 1838, part of which was raised by the first Seedsmen of this country, and a part imported, all of which will be sold wholesale and retail, upon the best terms, such as

GARDEN PEAS; Early and Late assorted Cabbage; Cauliflowers; Radish; Lettuce; Cucumber; Parsnip; Carrot; Onion; Rutabaga Turnip; Parsnip seed of all kinds, Garden Beets assorted; French Sugar Beet; Mangel Wurtzell, &c. &c. Also Field SEEDS, such as Early Sugar, Early White, Sioux, Chin or Tree Corn; Dutton, Baden and Twin Corn; Red Clover; Luzerne and White Dutch Clover; Timothy; Orchard; Herds; Millet, Tall Meadow Oats; superior Weed Oats; Spring Wheat; Spring Rye; Spring Barley; Seed Buckwheat; blue and Kentucky Lawn Grass, &c. &c.

Also GARDEN TOOLS, assorted sizes, and late improved patterns; Bird Seed of all kinds, Double Dahlias, Hyacinths, and Polyanthus, assorted, and selected for beauty and richness of colours, together with choice Flower Seed, assorted; Mulberry Trees; Fruit and Ornamental Trees; Silk worm Eggs; &c.; Agricultural Books; Silk Manuals; &c. Rohan Potatoes—Early Seedling do. &c. All orders by mail or otherwise will meet with early attention and dispatch, on the best terms for cash.

ja29

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THE ORANGE FARM.

This highly improved Farm situated two miles from this city on the Philadelphia Turnpike road, is offered for rent. It contains about 300 acres of land; in the improvement of which no expence has been spared for many years. In addition to a large quantity of barn yard manure, ashes, &c. 25,000 bushels of lime have been advantageously spread within the last four years. The improvements consist of a plain DWELLING with ample accommodation for labourers, a costly Switzer Barn, stables for one hundred Cows, a well arranged and extensive dairy, Ice House, Steaming Room with boilers complete and every accommodation for a dairy farm on the most extensive scale. The House, furniture, farming utensils and horses will be let with the farm.

S. W. SMITH.

ja 29 15t

Monument Square, Baltimore.

BARHAMVILLE INSTITUTE,

With 10,000 *Morus Multicaulis* Trees, for sale.

The establishment now offered for sale, is called Barhamville. It is beautifully and eligibly situated about 2 miles from Columbia, (the capital of S. C.) in a region of country termed the Sand-Hills. The grounds comprehend between 500 and 600 acres; they are well timbered, (chiefly pine and small oak); about one half consist of what is termed bottoms, rendered perfectly dry and tillable, by at least 6000 yards of ditching, most of which measures 5 feet in width by 3½ in depth. There are upwards of 70 acres completely ditched, now ready for being broken up, which I value at \$50 per acre.

The Institute buildings are situated upon a high range of Sand-Hills, proverbial for health, inasmuch that the neighborhood affords a retreat for many of the families of Columbia during the summer months. It was on that account that the site was selected for the business (a female Boarding School) to which the buildings have been dedicated. The water is excellent, supplied by two pumps—besides which there are two excellent springs.

The centre building is of wood, well plastered, and neatly finished throughout, and measures 54 feet square, three stories high; the upper room or attic story being 15 feet in height. Beneath this building is an excellent cellar, above ground. The wings attached to the centre building are 100 feet each in length, the one 24 and the other 34 feet in width. The southern wing is of brick, well plastered, two stories high, well finished throughout, having an excellent cellar above ground. The northern wing, recently built, is of wood, ceiled throughout. It is three stories high, with an attic story equal in its area and superior in its height to the three lower stories. The basement story of this wing is of brick.

A mahogany spiral stair-case of superior workmanship, which with other improvements attached, cost upwards of \$2500, ascends throughout the centre building.

From the extremity of the brick wing, and at a right angle with it, proceeds a building, (the academic edifice) 134 feet in length by 34 feet in width, two stories high, well ceiled throughout, and having an excellent cellar above ground.

Besides fire-places, the whole establishment, with the exception of the brick building, is warmed by air-furnaces, on the most improved plan, similar to that by which Grace Church and many public and private edifices in Philadelphia are warmed.

The expense of erecting the apparatus, &c. amounted to upwards of \$2500.

The area of all the floors in these buildings, is, by measurement, upwards of 100,000 square feet. On the Institute buildings is an insurance for \$15,000.

There are also, at a small remove from the main buildings, two residences, cottage-built, neatly finished; the one containing 4, and the other, 2 rooms.

Within 300 yards of the Institute, on an eminence, is the mansion built by me for the late John La Taste, repurchased by me from his family. This is a highly improved residence. The house stands upon brick pillars about 5 1-2 feet from the ground; the four lower and two upper rooms being well finished; out-houses, &c. in good order.

It is unnecessary to say, that the out-buildings of the institute are, in every respect, correspondent to the main building. The garden has been improved at a considerable expense.

With the above establishment, every way fitted for an extensive Silk Factory, may be had 10,000 *Morus Multicaulis* trees, 500 of which are 6 years old, all of vigorous growth, which, at the present time, will yield upwards of 200,000 cuttings; they are now regularly planted, 12 feet by 12. 100,000 cuttings, of two and three eyes each, are now being set out, well secured from frost by a ground dressing of long manure.

When the intrinsic value and resources of the above establishment are taken into consideration, and when it is recollected that in one year, from the present time, Columbia will be connected with Charleston by a rail-road, now in a vigorous state of progression; when it is, furthermore, recollected, that this rail road is to connect the sea-board with the great north-west, it may be said that the property now offered for sale, presents inducements to individuals or companies, desirous of embarking extensively in the Silk business, unsurpassed by any thing offered in this country.

The buildings, collectively, cost upwards of \$60,000, and the lands, with the improvements bestowed upon

them, will command at auction \$25 per acre, and, as it respects the value of the trees, an estimate can be easily made by reference to the prices they are now commanding in the Northern and Middle states.

I will sell the above at two-thirds of the original cost, on the following terms: one-third cash, and the remaining two-thirds payable in one and two years, with interest from time of sale, mortgage and approved security and policy of insurance assigned.

ELIAS MARKS, M. D.
Barhamville, near Columbia, S. C.

I will dispose of 100,000 cuttings (or 200,000 eyes) each cutting to consist of 2 or 3 eyes, hermetically sealed at each end with a composition of beeswax and rosin. Price 2½ cts. per eye, delivered in Columbia. E. M.
de 18 6t



Wm. Prince & Sons will make sales of Trees and Cuttings of the Genuine Chinese *Morus Multicaulis*, *Morus Expansa*, Alpine, Broussa, Canton, and other varieties, deliverable to the purchasers at such period in the Spring, as is convenient to them, and will enter into contracts accordingly. Prices and terms for the trees and cuttings will be forwarded to all who may apply for them by mail, as well as prices of silk worm eggs, mulberry seeds, &c. The *Multicaulis* trees are remarkably vigorous, and as we first imported the genuine tree, purchasers are sure of obtaining the true kind. It is from this cause, and from the great attention aid by them, that the trees they have sold have given universal satisfaction.

Flushing, near New York—Jan. 1. 1m

FARMERS' REPOSITORY OF AGRICULTURAL IMPLEMENTS AND EAST- MAN'S CYLINDRICAL STRAW CUTTERS IMPROVED.

THE Subscriber informs the public that he has secured by letters patent his late and very important improvements on his Cylindrical Straw Cutter, by which improvements they are made more durable and easier kept in order. All the machinery being secured to an iron frame the shrinkage, wear and decay of wood is avoided. The feeding part of his improved machine is upon an entire different principle from the former machine; far more durable, requiring neither skill or care to keep it in order. These machines are so constructed as to make the freight on them less than half what it cost to ship the former or wood machines, an important desideratum to purchasers living at a distance; and I now offer it to the public upon the credit of my establishment as the most perfect machine in existence for the same purpose. They are also adapted to cutting rags for paper making, and for cutting tobacco as manufactured by Tobacconists, &c.

I also keep these machines on hand made as heretofore with my new feeding machinery attached to them; and also a general assortment of Agricultural Implements, as usual. Elliott's Horizontal Wheat Fans, and Fox & Bolland's Threshing Machines are both superior articles.

My stock of Ploughs on hand are not equalled in the city either for quality, quantity, or variety. I have a large assortment of Plough Castings at retail or by the ton, and having an Iron Foundry attached to my establishment can furnish any kind of Plough or Machine Castings on reasonable terms and at a short notice.

All repairs done with punctuality and neatness. On hand, a few Patent Lime Spreaders, Horse Powers, &c. &c.

Also just received, a fresh supply of Landreth's superior Garden Seeds. In store, superior Timothy and Orchard Grass Seed and Seed Oats. All implements in the agricultural line will be furnished by the subscriber, as good and on as reasonable terms as can be had in this city, with a liberal deduction to wholesale purchasers. Likewise will receive orders for Fruit Trees from Mr. S. Reeves' Nursery, New Jersey.

JONATHAN S. EASTMAN,
Pratt street, Baltimore,
Between Charles & Hanover sts.

feb 20

ROBERTS' SILK MANUAL.

Price per single copy, 37½ cts.—to dealers who take 100 copies or more, a deduction of 33½ per cent. discount will be made; to those who take a less number, 20 per ct. will be allowed.

THE MARYLAND SILK COMPANY OF BALTIMORE

Offers for sale 25,000 genuine *Morus Multicaulis* trees, 20,000 Alpine, Canton, and other varieties.
d 25 L. J. COX, President.

SEEDS, PLANTS, FLOWERS.



The subscriber offers for sale at his establishment a fresh supply of GARDEN SEEDS of the very best quality; those that cannot be grown in this country he imports direct from Europe from a source that can be relied on.

Besides a large collection of GREENHOUSE, hardy ORNAMENTAL TREES and Shrubs, Herbaceous Plants, and Bulbous Roots, and a choice collection of the very finest double Dahlias offered for sale, all on reasonable terms, wholesale or retail.

Also on hand a few bushels of ITALIAN RYE GRASS, with 100 bush. ITALIAN SPRING WHEAT, of the true kind. All orders for Fruit and Ornamental Trees, or any thing appertaining to his establishment will be strictly attended to, by

JOHN FEAST,
Florist & Seedsman, cor. of Lexington and Pine sts.
ja 22 tf Baltimore.

CHINESE MULBERRY TREES.

American Silk Agency, No. 95, Walnut st. Philadelphia

The subscriber having opened a permanent Agency for the purchase and sale of all articles connected with the culture and manufacture of Silk in the United States, offers for sale all the different varieties of MULBERRY TREES, suitable for raising the SILK WORM; viz: *Morus Multicaulis* Alpinese, *Brussa Multicaulis* Seedlings, *Morus Expansa*, *Multicaulis* Cuttings, Improved Italian Trees, &c. Also, Cuttings from Norton's Virginia Seedlings, and Cunningham's Prince Edward GRAPE VINES. These vines produce an abundant crop of fruit, warranted not to rot or mildew and are fine for the table, and capable of yielding the finest wines.

S. C. CLEVELAND, Agent.

SILK AGENCY OF BALTIMORE.

The undersigned has opened the Spacious Room, No. 194 Baltimore street, for the purpose of Receiving, Exhibiting, and Selling on Commission all useful and approved articles connected with the growth, production and manufacture of American Silk. This establishment is designed also to concentrate information and improvement on the subject and advancing this great national enterprise. The following are among the articles which will be constantly on sale, viz:

Morus Multicaulis, Canton, Alpine, Asiatic, *Brussa* and other approved MULBERRY TREES, to produce food for Silk Worms.

Cocoons of every variety.

Eggs for producing Silk Worms.

MACHINERY for Reeling and Manufacturing.

Periodicals and Standard Works, for giving information
jan 1 3t* E. CENTER.

SPLENDID BLOODED STOCK FOR SALE.

The proprietor of Covington farm will dispose of the following fine bulls on reasonable terms, viz.

One bull two and a half years old.

One do. six months old.

Of the improved Durham short horn breed; the dam of the first was got by the celebrated bull Bolivar; for size, form and beauty they are not surpassed by any animal in the state.

Three Devon Bulls, one of which is seven years old next spring, and the largest Devon in the State. The Devons are from the stock of the late Wm. Patterson, and of undoubted purity.

Two half Devon bulls.

Two bulls half improved Durham short horn, and half Devon.

One splendid bull, a cross of the Bakewell, Alderney and Devon.

One bull, half Alderney and half Holstein.

These fine animals may be seen at Covington farm, near Petersville, Frederick county, Md. on application to James L. Hawkins, Baltimore, or to
se 11 . f FREDERICK FERT, Manager.

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every MONDAY

	PER	FROM	TO
BEANS, white field,	bushel.	2 00	
CATTLE, or the hoof,	100lbs	8 50	9 00
CORN, yellow	bushel	86	87
White	"	86	87
COTTON, Virginia,	pound	14	15
North Carolina,	"	13 1/2	14 1/2
Upland,	"	11 1/2	15
Louisiana — Alabama	"	15	16
FEATHERS,	pound.	55	
FLAXSEED,	bushel.	1 69	1 75
FLOUR & MEAL—Best wh. wh't fam.	barrel.	10 00	10 50
Do. do. baker's	"		
SuperHow. st. from stores	"	8 12	8 25
" wagon price,	"	7 75	7 75
City Mills, super.	"		8 25
" extra	"	8 50	
Susquehanna,	"		
Rye,	"	5 50	
Kiln-dried Meal, in hhd.	hhd.	19 00	
do. in bbls.	bbl.	4 00	
GRASS SEEDS, wholes. red Clover,	bushel.	14 00	16 00
Kentucky blue	"		
Timothy (herds of the north)	"	3 00	
Orchard,	"	2 00	2 50
Tall meadow Oat,	"		3 00
Herds, or red top,	"	90	1 00
HAY, in bulk,	ton.	12 00	16 00
HEMP, country, dew rotted,	pound.	6	7
" water rotted,	"	7	
Hogs, on the hoof,	100lb.	8 50	8 90
Slaughtered,	"	8 00	8 50
HOPS—first sort,	pound.	20	
second,	"	18	
refuse,	"		
LIME,	bushel.	32	33
MUSTARD SEED, Domestic, —; blk.	"	3 50	4 00
OATS,	"		1 12
PEAS, red eye,	bushel.		1 12
Black eye,	"	1 00	1 12
Lady,	"		
PLASTER PARIS, in the stone, cargo,	ton.	4 25	
Ground,	barrel.	1 50	
PALMA CHRISTA BEAN,	bushel.		
RAGE,	pound.	3	4
RYE,	bushel.	100	103
Susquehanna,	"	none	
TOBACCO, crop, common,	100lbs	5 00	5 50
" brown and red,	"	6 00	6 50
" fine red,	"	9 00	12 00
" wrappery, suitable	"		
for segars,	"	10 00	20 00
" yellow and red,	"	10 00	14 00
" good yellow,	"	10 00	15 90
" fine yellow,	"	12 00	15 00
Seconds, as in quality,	"	6 00	
" ground leaf,	"	7 00	9 00
Virginia,	"	6 00	10 00
Rappahannock,	"		
Kentucky,	"	6 00	8 00
WHEAT, white,	bushel.		
Red, best	"	1 80	
Maryland	"	1 60	1 75
WHISKEY, 1st pf. in bbls.	gallon.	44	45
" in hhd.	"	41	
" wagon price,	bbls		41
WAGON FREIGHTS, to Pittsburgh,	100lbs	2 00	
To Wheeling,	"	2 25	
WOOL, Prime & Saxon Fleeces,	pound.	50 to 55	
Full Merino,	"	45 50	
Three fourths Merino,	"	40 45	
One half do.	"	35 40	
Common & one fourth Meri.	"	35 40	
Pulled,	"	30 33	
POTATOES, 60 to 70 cts. a bushel.			

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,	barrel.		
BACON, ham, new, Balt. cured....	pound.	15	
Saunders, do.	"	12 1/2	
Middlings, do.	"	12 1/2	
Assorted, country,	"	12 1/2	
BUTTER, printed, in lbs. & half lbs.	"	31	50
Roll,	"	25	31 1/2
CIDER,	barrel.	1 75	2 00
CALVES, three to six weeks old....	each.	5 00	6 00
Cows, new milch,	"	25 00	40 00
Dry,	"	12 00	15 00
CORN MEAL, for family use,	100lbs.	2 00	2 12
CHOP RYE,	"		1 60
EGGS,	dozen.	37 1/2	
FISH, Shad, No. 1, Susquehanna,	barrel.		
No. 2,	"		
Herrings, salted, No. 1,	"	6 00	6 25
Mackerel, No. 1, ———— No. 2	"	11 50	13 50
No. 3,	"	7 50	
Cod, salted,	cwt.	3 25	3 37 1/2
LARD,	pound.	12	13 1/2

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

		VIRGINIA.
U. S. Bank,	par	Farmers Bank of Virgi. par
Branch at Baltimore,	do	Bank of Virginia,
Other Branches,	do	Branch at Fredericksburg, do
		MARYLAND.
Banks in Baltimore,	par	Petersburg,
Hagerstown,	o	Norfolk,
Fredrick,	do	Winchester,
Westminster,	do	Lynchburg,
Farmers' Bank of Mary'd, do		Danville,
Do. payable at Easton,	do	Bank of Valley, Winch. par
Salisbury, 1 per ct. dis.		Branch at Romney, ... par
Cumberland,	par	Do. Charlestown, ... par
Millington,	do	Do. Leesburg, ... par
		DISTRICT.
Washington,		Wheeling Banks, 2 1/2
Georgetown,	Banks, 1/2 p.c.	Ohio Banks, generally 3
Alexandria,		New Jersey Banks gen. 3
		PENNSYLVANIA.
Philadelphia,	par	Massachusetts, 1 1/2 a2
Chambersburg,	1/2	Connecticut, 1 1/2 a2
Gettysburg,	do	New Hampshire, 1 1/2 a2
Pittsburg,	2 1/2	Maine, 1 1/2 a2
York,	1 1/2	Rhode Island, 1 1/2 a2
Other Pennsylvania Bks. 2		North Carolina, 3 a2 1/2
Delaware [under \$5] 4		South Carolina, 4 a5
Do. [over \$5] 1 1/2		Georgia, 5 a5 1/2
Michigan Banks,	10	New Orleans, 7 a3
Canadian do.	10	

FOR SALE,

A valuable FARM of prime soil, on the Western Run in Baltimore county, about two miles north west of the 14th mile stone of the Baltimore and York turnpike road, and at the same distance from the depot of the Baltimore and Susquehanna rail road, at Cockey's tavern, in a rich, highly cultivated and healthy tract of country.

This farm contains from 260 to 270 acres, having a full proportion in wood, much of which is building timber, peculiarly valuable in that neighborhood; is in the best state of cultivation; a considerable part in productive timothy meadow; and the residue of the arable land, not in grain, is well set in clover, the whole under good fencing, laid off into convenient fields, each of which is well watered. The farm has a large quarry of excellent building stone. There are on the premises an apple orchard of select fruit trees, which seldom fail to bear abundantly; a valuable mill seat on the Western Run, with a race already dug. There is no location in the country more favorable for a grist mill, having the advantage of a rich and thickly settled neighborhood, and a good public road leading thence to the turnpike road. Buildings substantial and convenient, being a STONE DWELLING, and kitchen of two stories; a large stone Switzer barn, with cedar roof and extensive stabling below; large hay house and stable for cattle; stone milk house near the dwelling, with a spring of fine never failing water, with other out-houses. On the country road near the mill-seat a good house and shop for a mechanic, under rent to a good tenant. It is well known the lands on the Western

Run are in every respect equal, if not superior to any in the county. Adjoining or near are the lands of Col. N. Bosley, Daniel Bosley, Thos. Matthews and others. The water power, with about 20 acres of land, is so situated that they may be detached and sold separately, without injury to the rest of the farm for agricultural purposes. Terms of sale will be liberal. Apply to

NATHANIEL CHILDS,

on the premises, or to

WILLIAM J. WARD,

oc 23 tf

Fayette, near Calvert st. Baltimore.

FARM FOR SALE.

The subscriber has for sale a beautiful little Farm consisting of about 80 acres of land, in a high state of cultivation, having been occupied for several years as a dairy and market garden; it bounds on the eastern line of the city for nearly half a mile, and about the same distance on the Philadelphia turnpike. The improvements consist of a substantial two story dwelling house with two wings, barn, stable, poultry, spring and milk houses, and outbuildings. There is near the house a spring of excellent water, which empties into an ice pond.

The access to this property is by the Philadelphia turnpike, which is confessedly one of the best roads in the union, and from its contiguity to this city, being only 2 miles from the centre thereof, is a most desirable property. For terms apply to

E. P. ROBERTS,

Baltimore, Md.

DURHAM AND OTHER STOCK FOR SALE.

The subscriber offers for sale the following truly valuable stock, at the prices affixed to each animal. Applications to be made to him at his residence in Philadelphia, Pa. or to the Editor of the Farmer and Gardener, Baltimore, Md.

No. 2. Bull Hector, roan, calved Aug. 20, 1836, two years old past, dam Daphne, bought at Col. Powell's sale April 23d, 1836, then a heifer in calf by, it was said, *Bertram* 2d; he is a very fine bull for his age, and well formed, with very good points—see Herd Book.—Dam's pedigree: a roan, bred by Chas. Barnitz, esq. by Emperor, g. d. Coquette, bred by Col. Powell, g. g. d. Fairy, g. g. d. Prize, g. g. g. d. Buckingham—price for Hector \$150.

No. 3. Cow York Belle, yellow roan, full bred Durham Cow, 5 years old, dam Martha, bred by Col. Powell by Wye Comet, g. d. imported Laura; sire of York Belle was Mr. Barnitz's splendid bull Emperor. York Belle was purchased at Col. Powell's sale, 23d April, 1836, then a heifer; now in calf by Defiance 1st; bulled June 15, 1838. Price \$250.

No. 4. Vermilion, brindle heifer, 2 years old, dam Lady Delight, the famous butter cow, formerly owned by Col. Powell; Lady Delight produced 19 pounds of butter in one week; sire, a full bred bull kept near R. T. Potts, esq.'s farm in Montgomery county, bulled by Defiance 1st, 10th May, 1838—price \$200.

No. 5. Bright Eyes, red roan heifer, calved 25th of March, 1838, dam Daphne, by Emperor, g. d. Daphne 1st, g. g. d. Coquette, g. g. g. d. Fairy, g. g. g. d. Prize, g. g. g. g. d. Buckhorn, sire Defiance 1st—price \$200.

No. 6. May Flower, red and white heifer, calved 1st May, 1838, dam York Belle, g. d. Martha, by Wye Comet, g. g. d. imported Laura, sire Defiance 1st—price \$225.

4 Bakewell Rams, price \$100, \$50, \$30. Each very superior sheep.

The above stock was much admired at our agricultural Fair; they are in fine condition, not over and above loaded with fat, but in fine healthy condition—they are truly worth the attention of some spirited agriculturist.

JOHN BARNEY,

Philadelphia.

jan 15 3t

SILK AGENCY,

Corner of E. and 7th streets, Washington City, D. C.

The subscriber having commenced an Agency for the purchase and sale of SILK MULBERRY TREES, and all articles connected with the growing of Silk, offers for sale the following varieties of Mulberry Trees at Baltimore prices, viz. Multicaulis, Alpine, Broussa, White Italian and Canton; also Mammoth White Silk Worm's Eggs, warranted to be of superior quality. All the recent publications on silk growing for sale, and subscriptions received for the various periodicals devoted to that subject.

no 20

J. F. CALLAN.

THE AMERICAN FARMER.

The proprietors of this paper have a few complete sets of this work on hand, which they will dispose of at the reduced price of \$50 a set.

oct. 16

3

THE FARMER & GARDENER

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, E. P. ROBERTS AND SAMUEL SANDS—EDITED BY E. P. ROBERTS.

No. 41.

BALTIMORE, MD. FEB. 5, 1839.

Vol. V.

— This publication is the successor of the late **AMERICAN FARMER** and is published at the office, at the N. W. corner of Baltimore and North streets, over the Patriot office, at two DOLLARS AND FIFTY CENTS per annum, if paid within one month from the time of subscribing, or \$3 if after that time. All letters to be postpaid.

BALTIMORE: TUESDAY, FEB. 5, 1839.

The communication in another column upon the subject of the effects of oyster shell lime, is rather discouraging. The experiments recited by our correspondent, go strongly to impress the reader with the belief that it has no efficacy; and as the subject is one of vital importance to the whole tide water country, we sincerely hope that such of our readers as may have used lime from shells, will favor the public, through our columns, with the result of their respective experiments.

We are aware that great use has been made on the Eastern Shore of this State of this particular kind of lime, and as we have understood the best effects have followed its use, we hope the gentlemen who have derived these benefits will feel themselves called upon to give the light of their experience to the public.

— To our *Eastern Shore editorial brethren*, we respectfully prefer the request, that they will publish this article, together with the communication in question, in order that it may receive the proper attention; the subject being one of deep importance to a very large portion of the agriculturists of the country.

— We observe that several bills have been introduced into the legislature of Maryland, to incorporate *Silk Companies*, and we trust that each and all may not only go through successfully, but that the enterprising members of the several companies will derive handsome profits from their investments. The establishment of companies for the purpose of manufacturing the raw material into silks, in various forms, will secure to the small farmers, markets for their cocoons, and thereby encourage them to engage in the feeding of the worms. Let the farmers of Maryland once fairly engage in this business, and instead of our young and enterprising agriculturists being driven from their homes to remote regions by

stern necessity, we shall behold our old fields restored to fertility, and happy and prosperous communities gladdening the eye in every direction.— That God may speed the good work is our sincere aspiration.

ENCOURAGEMENT TO AGRICULTURE.

We have, from time to time, during the present session of the legislature of this state, been happy to observe a disposition to do something for the benefit of agriculture. We have allusion to the several motions relative to the offering premiums for the discovery of preventive and remedial means against the *Hessian Fly*, *Grub Worms*, *Grasshoppers*, *Tobacco Worm*, and *Tobacco bug*. Even the introduction of these motions, show to us, that the agricultural community is becoming awakened to a just sense of the importance of their calling, and we rejoice that it is so, for if the great body of husbandmen once become alive to their interests, those to whom the duty of legislation are confided, will very speedily perceive the propriety of acting for the public weal, as the teachings of numbers are amongst the "sovereignest thing" on earth, and never fail to carry with them a moral and an argument alike instructive and conclusive.

THE SILK CULTURE IN ALMS' HOUSES.

We have been pleased to see several movements made in the legislature of Maryland, to introduce this business into the Alms' Houses of several of the counties. These movements are founded in wisdom, and we trust will be successful.

It is now nearly four years since, with no little labor, we prepared a letter to the Trustees of the Poor of Baltimore City and County, demonstrating, as we thought, the advantages, and recommending them to adopt this culture on the Alms' House farm, and all we have ever heard from the operations of that body was, that they had bought an ounce or two of mulberry seed. What other progress they may have made, if any, we have yet to learn. But this we do know—that had they met our proposition in the spirit and zeal with which it was made, and carried out our views, that institution by this time might have re-

alized from the sale of *Morus Multicaulis* trees alone, at least two hundred thousand dollars, and it would have had a mulberry orchard standing, which would have been competent to afford foliage enough to feed as many worms as would yield silk enough to defray all the expenses of the establishment. But as it is never too late to do good, we do hope that, if they have the power, they will now take measures to introduce the culture there, in order that the city and county may be relieved of the burden of the support of the paupers of the institution. And if the power does not exist, we sincerely hope that measures will be forthwith taken to procure it from the legislature now in session.

MICHIGAN.

We make the following extract from the message of the Governor of this young State, to show the laudable attention which the executive of it pays to the interests of agriculture, in the hope that those who preside over the older members of the confederacy may emulate the noble example he has so patriotically and wisely set them. As a friend to agriculture we return to Governor Mason, our unfeigned thanks and trust it may be his lot, under the dispensation of Providence, to live many years to enjoy the rich fruits of his provident recommendations.

The Geological survey authorized by the legislature has progressed with all the expedition the nature of that important work would permit; and the high character and scientific ability of those to whom the survey is intrusted insure its satisfactory completion to the public. For full information on the subject, I refer you to the report of the chief officers of this department which will be submitted at an early day. From this source it will be perceived that the anticipation of benefits to the State from this survey, are about to be fully realized, and the resources of wealth developed to Michigan are unbounded.

At the last session of the legislature, I called the attention of your predecessors to the importance of encouraging, by legislative enactments, the agricultural interests of the state. A bill, with this object, passed the house of representatives at that period, but failed to receive the action of the senate. The agricultural interest is one of great importance, and claims the protection of the government; and yet, it has received less aid from direct legislation, than any other department of industry. But I feel that when it is recollected how essentially the real prosperity of Michi-

gan depends upon the cultivation of her soil and the labors of her husbandman, the subject will receive your earnest consideration, and favorable action.

Value of Michigan Lands.—The following extract from the Detroit Courier, will show the value of improved farms in this State, which is more extraordinary, as the United States have millions of unsold lands in that State.

Washtenaw County Farms.—A farm about three miles from Ypsilanti, containing 400 acres, 80 acres clear, was last week sold for \$35 per acre.

We have received the first number of the *Journal of the American Silk Society, and Rural Economist*, published in this city under the auspices of the National Silk Society, and edited by JOHN S. SKINNER, Esq. The present number is chiefly filled with the proceedings and debates of the National Silk Convention, which present many interesting facts and considerations to those interested in the culture of silk. It contains also the *Address to the People of the United States* by the committee appointed for that purpose by the late Convention. The mechanical execution of this number is highly creditable, and gives an earnest that the journal will not suffer in this respect. In the present number, occupied as it is with *documents*, the talented editor has had but little, if any, room to display those rare qualities which he possesses as a public writer; but all who recollect his brilliant career as Editor of the *American Farmer*, and *Turf Register*—and who does not?—will look forward with anxiety to the succeeding numbers for a glimpse of those racy and well digested effusions which in bye-gone days gave so much interest to those works.

For the Farmer and Gardener.
OYSTER SHELL LIME.
January 25th, 1839.

E. P. ROBERTS, Esq.—

DEAR SIR—Having expressed an opinion unfavorable to the oyster shell lime as a manure, which appeared to not coincide with yours, I will proceed to state my reasons for this (it may be) singular opinion.

In the year 1832, I burnt about 2000 bushels, from which I made a compost, one-half at least of which, was composed of rich earth collected from fence rows, which had remained mellowing and enriching itself for at least twenty years. In the autumn of the same year, I applied the compost broadcast on my wheat ground, and ploughed it in with the wheat. The result was exceedingly favorable, which I then attributed to the effects of the lime. I have since been convinced, it was partly the rich earth before mentioned, (as a large proportion of the compost,) and of deep ploughing.

In the early part of the year 1834, I burnt a-

bout 4000 bushels, and spread it on a field of 24 acres, that had been ploughed in the preceding autumn. In the spring it was harrowed with a heavy three horse harrow, and cultivated twice previous to putting it in corn. The corn was carefully cultivated, and in the month of August sown in timothy. There has been no benefit perceived from the application in either the crop of corn or timothy.

In May, 1837, I gave the oyster shell lime a more distinct trial. In part of the field I spread on a clover-lay 200 bushels barilla ashes per acre; on the other part of the same field—and all the land equally good—was spread 100 bushels oyster shell lime per acre. The whole was ploughed in early in June, when the clover was in blossom. The field was ploughed three times previous to sowing the wheat. The result was, the wheat on the ground ashed yielded an abundant crop, and that on the ground limed, scarcely paid the expense of cultivation. In several other parts of my farm, I have applied the oyster shell lime extensively, and have in no instance experienced any beneficial result.

One of our very intelligent Maryland farmers assured me he always doubted its efficacy, and had paid particular attention to its results for the last 15 years, and in no case has he discovered any benefit from the application of the oyster shell lime.

In reply to your enquiries of the oats sown by me, and quantity produced per acre, I take much pleasure in informing you, that in the year 1837, I sowed 10½ acres in what is generally called the Poland oats, and the produce was 650½ bushels well cleaned merchantable oats, and a small quantity unmeasured, say 15 bushels light, that would answer all the purposes for feed to my stock—I am under the impression the yield would have been larger had not they fallen about the time they were maturing.

In 1838 I sowed 13 acres of the same oats, the produce 715 bushels. The mode of cultivation was, to plough the ground deep in the preceding autumn, and again in the spring, after it had been well harrowed—I am under the impression the above is the general mode of cultivation, but of that I am unable to form a correct opinion, having never sown oats on my farm until the year 1837.

A SUBSCRIBER.

FACTS AND CALCULATIONS ILLUSTRATING THE IMPORTANCE OF THE SILK CULTURE.

We find the following article, on a subject of much importance, in a late number of the "Camden Mail." We commend it to general perusal as it possesses an interest which should be participated in by every one who has a wish to improve his fortunes.

MR. EDITOR:—Sir—In my last communication, I promised to furnish some facts to show that very great improvements may be made by changing a portion of the agricultural and manufacturing products of this country. Perhaps your readers will say that my first looks well in theory, but assertion is not argument; and will still doubt its practicability. Will you, Mr. Editor, be so good as to lay before them some extracts from a report of a committee to a meeting held in Philadelphia in 1837, at which the establishment of a

company for the production and manufacture of silk was resolved upon.

The committee say, "The periods of the year in which the silk worm is fed and when only the attention of the farmer and his family is required for their care and management, are those in which the usual labors of the farm are, for a great portion of those periods, not very great; and the large amount of the attention and industry which are required by silk worms when feeding, and making the cocoon, are most properly furnished by females, and children from twelve to sixteen years old. In the winter season, the family fire-side of the farmer, now comparatively without employment, may be engaged in reeling the silk from the cocoons, a most agreeable and profitable occupation for that part of the year."

"A large amount of free labor will be brought into employ, and the domestic silk trade of the north will one day rival that of cotton, rice, and tobacco at the south." "Three thousand good cocoons make one pound reeled silk; at that rate, the reeling being done at the manufactory, the silk will cost about three dollars per pound. When cocoons are produced in abundance, the committee are disposed to believe that at twelve cents per pound, the raising them will be as profitable as the raising of cotton at 15 cts."

"The estimate is made with confidence, that an establishment for the manufacture of silk into plain and ordinary articles, will cost no more than about one-eighth of a cotton factory, to turn out the same number of dollars worth of work; and with equal, if not greater profit."

"The present prices of raw silk are, Bengal, \$5 25 to \$6 per pound; China \$5 50 to \$6; Italian, \$6 60 to \$7 per pound."

"Floss and sewing silk, made from Bengal silk would cost—raw material, say \$5 25 cents,—dyeing, manufacturing and waste, \$1 50 per pound of 14 oz.—\$6 75. These articles are now worth—sewing silk \$10 to \$11; Floss \$11 to 12."

"The amount of sewing silk used in the U. States is immense. To manufacture enough of this article to supply the demand almost any amount of capital could be employed with little cost of machinery. It has been ascertained, one year to be 35,000 dollars."

Dr. Lardner estimates the annual quantity of silk used in England alone, at more than four millions of pounds of weight. Owing to the humidity of their climate, they are obliged to purchase this vast amount abroad; the amount of silk used in the U. States would soon quadruple even the vast quantity now used in England were it to become generally an article of domestic manufacture.

We will turn our attention to a communication of Robert Sinclair, published in the Farmer and Gardener, and the remarks of the Editor thereon. The substance of Mr. Sinclair's communication is, that from the first year's growth of the *Morus Multicaulis* "he raised from cuttings of one bud each, about three inches long, per acre, 10,080 pounds of leaves, the first season from cuttings—and a large portion of these leaves were produced in season for feeding the second crop of worms."

The Editor remarks thereon, that as 1000 lbs. feed 201,600 worms, and as 3000 worms will make a pound of silk, so will the aggregate make 67 1-5th lbs. of silk.

From a communication of Lemuel Cobb, in the N. E. Farmer, it appears that Messrs. Cheney of Connecticut, raised silk at the rate of 50 lbs. to the acre, from the first year's growth of the *Morus Multicaulis*, planted in layers. Dr. Lardner, the Editor of the Cabinet Cyclopaedia, in his history of silk, states that it proved "not only practicable, but profitable in Connecticut, where land was comparatively high rented, but where careful and intelligent white laborers might be procured." Here, then, is evidence enough combined to convince the most sceptical, not only that it can be produced, but that by substituting the cultivation of the Mulberry tree for some of our comparatively small crops, we might receive in nett profit, at least ten fold. If from cuttings we may the first year raise 50lbs. of silk, in the after years we may generally raise 100 lbs. as we may then gather two crops of leaves in one season.—This, as has been shown by prices of foreign silk, would be from 425 dollars to 700 dollars, per acre, or in sewing \$1000, two-thirds of which must be nett profit. I ask again, farmers, *why* do we import or buy 25 or 26,000,000 dollars worth of silk per annum? Why not supply our own market? Why not, instead of gazing at a few nabobs with their "gold shining through their *silk-en purses*," see our entire population of all ages, sexes and classes, as well clad, as those yellow shiners; or as "in the widely spread region of China, where all from the Emperor on his throne, to the peasant in his lowly hut, are indebted for their clothing to the labors of the silk worm;" and why not do something toward supplying the foreign market?

Important to Farmers.—An English paper relates that a practical farmer at the annual dinner of the Preston agricultural society, gave some account of various interesting discoveries in farming, particularly as related to economy of seeds. He said that he had always been of the opinion that much less seed than was generally used for grain would answer the purpose. With this impression he made experiments upon different portions of the ground. He had planted at the rate of one grain of wheat to a square foot, or nine grains to a square yard. In several instances one grain had produced thirty-eight stems—in others rather less—but in all a crop amply sufficient. He had also examined the heads, and found that one head contained as many as forty-two grains. The general result of this calculation showed a produce at the rate of thirty-two bushels per statute acre. There were 4640 grains in a half a pound of wheat, and thus according to the proportion he had named, 4 lbs. 10 oz. of seed would be found sufficient for a statute acre. This he thought was a subject deserving the consideration of agriculturalists. He had this year drilled three acres, in rows of from twelve to thirteen inches asunder, and though this was to a small extent following out the former experiment, yet it would be a guide to the principle.—*Poulson's Adv.*

Improved Cross of Sheep.—Charles Vaughn, a distinguished breeder and farmer in Maine, has published in the Maine Farmer, letters highly extolling his improved breed of sheep, which are a cross of the South-Down with the Dishly, or new Leicester. The particular points of excel-

lence are large size, hardiness, early maturity, and we venture to add, from the known character of the South-Downs—excellence of mutton. Lambs of fifteen days old have weighed 20 lbs. and at five months have weighed 65 lbs. upon ordinary keep. There is nothing unreasonable in the supposition, that the breeds of domestic animals can be improved here as well as in Britain, if we bestow upon this subject the same judgment and care that they do there. From what we have seen of Mr. Vaughn's writings, and heard of his practice, we are disposed to believe that he possesses high qualifications as a breeder.—*Cultivator.*

Premium on Silk.—An act has passed the Legislature of Delaware, allowing a premium of fifteen cents per pound, for cocoons raised in the State, and fifty cents per pound for raw silk reeled from such cocoons. The law is to continue for four years, and incorporated silk companies are to be excluded from its benefits.

DR. VAN MON'S EXPERIMENTS.

We consider ourselves very highly indebted to our respected correspondent, Gen. Dearborn, for the annexed letter from the venerable Van Mons; and the eloquent remarks with which he has prefaced this letter. The history of Van Mons is remarkable as illustrating the extraordinary power of a true philosophical self-government. When the dog of Sir Isaac Newton by accident destroyed some of his most valuable manuscripts or calculations, on which he had spent immense toil and pains, with perfect composure he merely said to him, that he did not know what injury he had done to the world. The destruction of Von Mons nursery on which he had expended the anxious labor of so many years, by a set of Vandals, must have been a much more severe trial of his firmness and temper, as it was done by persons who at least ranked among rational beings, and probably would have been offended not to have been considered the friends of science; and the loss and calamity in this case was in his life time utterly irreparable. This is indeed an affecting example of the moral sublime. It is not stoicism, but true philosophy; for the manner in which he afterwards speaks of the far heavier affliction, the death of his eminent and beloved son, shows the intensity of feeling of which he was susceptible, and that his soul could be moved to its very depths.

N. E. Farm.

H. C.

An account of the Experiments of Doctor Jean Baptiste Van Mons, on the Production and Culture of New Varieties of Fruits.

MR. BRECK,—

A letter having been recently received from the venerable Dr. Van Mons, of Louvain, in Belgium, which contains an account of some remarkable experiments he has lately made, on the propagation of pears, and preventing the disease to which the peach is liable in that country, as well as valuable information on other rural subjects, it has been considered that its publication would be interesting to all those who are engaged in the cultivation of fruit trees, and a translation has therefore been made, which is annexed.

Repeated notice has been taken in the Horticultural Register and New England Farmer, within the last ten years, of the meritorious and successful labors of that illustrious man, to multiply the

varieties of the pear, apple and peach, by replanting the seeds of successive generations of trees; and our nurseries are now in a condition to furnish more than eighty new kinds of the former delicious fruits, all of which are of his creation.

Although his plantations have been thrice wantonly destroyed, by the officers of the government, and the ground appropriated to other purposes, still we find that enterprising, intelligent, and indomitable philosopher just establishing two others, at the advanced age of nearly eighty, with an enthusiasm and cheerfulness which would do credit to any one, who had just commenced the career of life. Like the affectionate father of Ulysses, he plants for other generations, with the fond hope that they will reap the advantages of his toils, and be grateful for the service he has so generously attempted to render them, when it was impossible that he could expect to enjoy the fruit of the seed which his trembling hands consigned to the earth.

There is a moral grandeur in such beneficent efforts to advance the arts of civilization and administer to the wants, the comforts and the pleasures of the whole human race, which is truly sublime, and merits the admiration and most profound respect, of every enlightened mind.*

Even the tremendous and withering shock which the patriarch of Horticulture has received, in the sudden death of a beloved son, who was the pride of Brussels, the ornament of Belgium, and an honor of the age in which he lived, has not chilled his ardor, or checked his labor in the prosecution of those valuable experiments, in which he had persevered for nearly seventy years; and when a temporary abatement of a lingering and painful disease allowed this good old man once more to go out into the open air, and look forth on the beauties of the vegetable realm, the first object of his attention was the new plantation of trees, which he had undertaken to establish.

Thus the afflicted father seeks consolation in his generous endeavors to become the benefactor of his fellow-men. When hastening to follow his departed son, he is anxious to leave memorials of his ardent disposition to be useful; and anticipates the sepulchral rites of oriental piety and respect, by planting, himself, the trees which shall overshadow his tomb and perpetuate his name. We are deeply indebted to Robert Manning of Salem, and Wm. Kenrick of Newton, for the numerous choice varieties of pears which have been introduced from the celebrated seminaries of Dr. Van Mons and other plantations in England and France. They have been indefatigable in their exertions to obtain the most valuable kinds, and merit the sincere thanks of their fellow-citizens, for their emulous labor in that department of rural economy, as well as for the establishment of extensive nurseries, which are among the first in the United States, for the excellence of the fruit, useful and ornamental trees and shrubs, which they contain.

The Botanical Agricultural and Manufacturing Monography of the Genus *Morus*,—Mulberry, by

*For an account of Van Mon's method of raising fruit trees from the seed, and the destruction of his nurseries, see No. 6, vol. 2 of the Horticultural Register.

M. Moretti, alluded to by Dr. Van Mons, must be a most instructive and valuable work, on a subject which now engrosses so much attention in this country. The culture of silk was the earliest introduced, and has ever been the most successfully prosecuted in Italy, since the naturalization of that invaluable Asiatic insect, which now furnishes such a large portion of the raiment of nations; and it is to be presumed that the author of the Monography has concentrated all the information which could be obtained, on the numerous branches of an industry, which is so well understood by his country. It is therefore hoped, that the annunciation of such a treatise, will be sufficient to induce some one of our intelligent and patriotic citizens who are familiar with the language, to procure and translate it, for the benefit of those who are interested in this new and important branch of industry.

In Italy the lamp of intelligence never went out, but continued, though dimly, to burn, during that long night of barbarism, which succeeded the fall of the Roman Empire; and in her bright skies, was the first dawn of that glad light of civilization, whose expanded radiance illumines the whole earth. It is not to be disguised that we have too long and too confidently seen through the medium of the eyes and listened to the voice of but a single nation, and that so implicitly and dependently, that our own faculties of exact observation have been almost suspended. Relying, apparently, on this complacent submission and ready credence to whatever was presented or proclaimed, the progress which has been made by France, Germany, Italy, and other continental kingdoms in letters, science and the arts, have been either studiously excluded from our examination, or placed in such false, or imperfect points of view, as to claim but little attention. The difference of language rendered the intellectual labors of the illustrious men of other European nations a sealed book, which but few could open. At last, however, a more enlightened and independent spirit has been developed, and by the meritorious labors of the emulous and gifted sons of the republic, the learning, genius, and taste of every age and people are being made known.

While we may with advantage read nearly all that is published in Great Britain, however partial the bearing towards that country, let it be borne in mind, that other nations are zealously pursuing the same enlightened route for the advancement of individual and public prosperity, and in many branches of intelligence and industry, surpass the best efforts which have been made elsewhere.—Besides, in whatever relates to the products of the soil, we must take a wider range than is presented by the limited climate of that island, which includes only six degrees of latitude, while the territory of the United States extends through twenty-five, and presents an agricultural domain, which reaches from the borders of the tropics, to near the confines of that region, where husbandry ends; and within which may be cultivated all the variety of plants, requiring the diversity of temperature, soil and climate, which is thus afforded. It is, therefore, rendered indispensable, that we should endeavor to gather information, in the diverse departments of rural economy from all those portions of the earth which are situated within like parallels,—where from long experience in

practical operations, the most perfect modes of tillage have been ascertained, matured and established.

That England has advanced with a rapidity and reached an excellence in whatever gives dignity to man and grandeur to a nation, unexampled in the history of nations, her adventurous descendants in this hemisphere are most ready to acknowledge. We look back to the land of our fathers with proud satisfaction, and thank God that we are of the Anglo-Saxon race; but it must be remembered that in beholding what was peculiar to "that water-walled bulwark," a prism has been often interposed, and the objects thus rendered dazzlingly conspicuous from the iridescent hues with which they were enveloped, while those of other nations were thrown so much into the shade, as to be invisible.

It is well known, that while Newton, Milton, and Dryden rendered their own names immortal, and reflected glory on that of England, Gallileo, Dante, and Ariosto gave lustre to the land of the Cæsars; and even during all the various forms of despotism under which the people had been wronged and oppressed, philosophy and letters, with all the embellishments of society have never ceased to flourish and advance; and there are numerous collaborators in all the departments of human wisdom, talent, and genius, whose splendid achievements are as remarkable and honorable, as those of any of the contemporaneous nations. If we know them not, or their glorious victories of intellect, erudition and skill in the broad circle of science, literature, and of the exalted as well as the useful arts, it is because we have, hitherto, been content with our own language and looked for intelligence, of all kinds, to that country and people from which it was derived.

But more enlarged views are being taken, of the march of civilization, and information is sought for its intrinsic worth, without regard to the nation or individuals, in which or by whom it has been obtained and revealed. Arbitrary power, aided by prejudice and ignorance, in vain attempt longer to coerce mankind to a servile credence in dogmas of moral and physical faith, or blindly to follow the customs of by-gone ages; for reason and fact are having their mighty influence. To attempt an exclusiveness of thought or of action or the establishment of a monopoly of the means of intellectual aggrandizement, are as futile and preposterous as would be the endeavor to make a special appropriation of the universally diffused rays of light, and the atmospheric air. Those long established sanitary cordons of bigotry, tyranny and persecution for the pretended preservation of the morals of a people, and which surrounded for centuries all the kingdoms of christendom, are no longer able to exclude the bold and resistless progress of TRUTH; for that divinity is not of the earth; but winged like an arch-angel, she surmounts the most towering and formidable barriers which man can rear; and poised aloft, beholds from afar, the smallest oasis in the wide-spread desert of ignorance, and thither wends her rapid flight, if in that sequestered verdant spot, there is to be found a single votary ready to greet and do her honor. She is the herald of intellectual freedom, and is producing a revolution, such as has never swept over empires. Adherents are mustering in every clime, under the capacious folds of

that brilliant oriflamme which he has fearlessly unfurled, and on whose azure field are inscribed in letters of starry effulgence,—CIVIL AND RELIGIOUS FREEDOM, GUIDED BY TRUTH,—THEY SHALL PREVAIL THROUGHOUT THE GLOBE.

Very respectfully,

Your obd't serv't.

H. A. S. DEARBORN.

Hawthorn Cottage, Roxbury, Jan. 12, 1839.

—
Louvain, Jan. 22, 1838.

MY DEAR FRIENDS,—

I seize the occasion which the minister of your government near ours, offers, to write and send you a few pamphlets.

It is a long time since I have received any communications from you, and I am still ignorant whether a bundle of scions which I sent at the commencement of last year, together with copies of a journal which I am publishing, reached their destination. I have since received two letters from Mr. De Wael.* The first announced his intention of returning from the United States in October, and the second, that he had postponed his departure, to the close of the year. He has not yet arrived.

I am not certain whether I shall be able to send you any scions; for, during the last fifteen days, it has been very cold, and the ground is covered a foot deep with snow; and no longer having any large trees, my nursery is buried up, with the tallis, placed at the roots, on which the names or number of the varieties are marked. If, however, Mr. De Wael returns in season, I will endeavor to obtain grafts from him.

The last of my gardens, which was near my house, was extirpated in the middle of the summer, and as I have already informed you, is now annexed to the laboratory and chemical cabinet of the Catholic University. I left there nearly all my trees, not being able to find an immediate place of refuge for them; but reserved the right to take samples of the fruit and scions of the newest varieties, to enable me to furnish descriptions and drawings for the work I was preparing for publication. Without, however, giving me notice, the whole were eradicated to give place to a garden, which has been laid out in the English manner, and when the superintendent of my nurseries went to make selections, nothing was left I am, nevertheless, on good terms with the authors of this inconsiderate act. The new University merits all my affections.

From a deference for what I believed to be for the true interests of the gardeners of that city, I was the first to establish a market for the sale of fruit trees, but notwithstanding my efforts to accomplish that object, 2000 pear and 500 apple trees of the most choice varieties, which I had created, after so many years of labor, have been forever lost,—for I have not been able to save scarcely any; and my friends and correspondents must perceive that I am no longer in a condition to answer their requisitions, while for myself, I have

*An eminent Botanist, of Belgium, who has made the tour of the United States, for the special purpose of making a collection of the aquatic plants, both of the salt and fresh waters. He is also a distinguished cultivator of fruit and other trees. He was in Boston in 1836 and '37.

only had the trouble of planting the seed, without the satisfaction of realizing the anticipated results.

I have, for some time, been induced to believe, that I should be able to replace our peaches, by preventing the disease, which causes the disease called the *curled leaf*. My experiment has succeeded perfectly. They were taken up and replanted early, on the first fall of the leaves in autumn. The roots were pruned and the small radicles or fibres suppressed, and then put back into the places from whence they had been taken and well manured. The vegetation of the roots of a peach tree is never doubtful. It is pruned and trained in the same manner as if it had not been disturbed, and yields as much fruit the following season.

I have cut off half the length of the main roots of free-stone peaches, which in the summer of the preceding year, were too much filled with wood, budded late, the leaves turned pale, and prematurely fell, and found that this suppression of the roots, not only hastened vegetation and prevented the blossoms from dropping off, but protected the trees, in a great measure, from the ravages of the *curled leaf*. This method obviates the necessity of taking up and replanting the trees, to accomplish the same object.

Apropos of peaches. I should inform you that while the curling of the leaves of the peach trees, last year, destroyed the crop of all my own varieties, those for which I am indebted to your liberality, were spared, and enabled me to taste the fruit, and plant the stones I obtained from them. It is proper, however, I should state, that the flesh of all of them, was like that of the *paviers* or cling-stones, and adhered to the stones.* Is it thus with you? or is it a vice which has been contracted with us. Many of your pears perished in the recent catastrophe, which befell my garden.

I contrived to plant seeds in two nurseries,—the soil of which is almost virgin, as if I were yet to remain for a long time in this world. I have recommenced my labors at a period when I had a right to expect I should have ended the experiments I have prosecuted for so many years.

The Imperial Society of Horticulture in Vienna, has consecrated a large tract of land, for prosecuting my experiments. The Prince De Goesslate, who is president, has requested me, in the name of the society, to send him the seeds and stones of my last renewals, for the purpose of being able to set out from the point which I had reached. I have transmitted all which I could collect. For the seed of the pears and apples of the last generations which preceded the accomplishment of the restorations, I was able to send those of the pears of the 4th, 5th and 6th, and apples of the 3d and 4th generations. You see that the society has well understood the basis of the system of regeneration which I have established.

I now propagate for myself and intimate friends the most choice varieties, which I obtain by means of the roots. Not a single one falls, in this new process. It is immaterial in what manner they are set out. This method was discovered accidentally, in consequence of some roots, on

which I intended to graft other kinds of pears, being thrown on the ground and covered with a little earth, to preserve them until used for that purpose, and which were lost sight of and forgotten, until the next spring, when all of them sent up stocks, which, in the autumn, were as tall as those raised from the seed, of two year's growth. They can be set out in the spring as well as autumn. If I had sooner known this method, I should not have lost a single one of my new varieties of pears,—for roots could have been taken from all the kinds, in my large plantation, at the time of its destruction.

Such roots should be selected as have one or more terminal fibres, and those that are often cut off, or left in the earth, when a tree is transplanted, succeed well. They cannot be too small, but should not be larger than the finger. The wounds at the large ends of the roots should be covered with some composition, to protect them, as in grafting. They must be set out obliquely.

Mr. Moretti, the Italian translator of my two volumes on the Chemistry of Davy, and professor of Botany in Pavia, informs me, in his last letter, that he has published a botanical, agricultural and manufacturing Monography of the Genus *Morus*,—Mulberry. The work is in three volumes. If you have not the *Biblioteca Agraria*, I can procure a copy for you. It is in twenty-two volumes, and to be continued.

You will perceive, my esteemed friends and honored correspondents,—if you look over journals I herewith transmit, the irreparable and ever lamentable loss which has befallen me, in the death of a son. He was an accomplished man in all respects, from his physical form, nobleness of character, elevation of sentiment, kindness of disposition, mildness of temper, and the natural and habitual practice of all the civil virtues. He had reformed and established medicine, on that enlightened basis which surgery had introduced. During the period of his sickness, as an extraordinary testimony of the respect, in which he was held, all the churches in the city were daily opened, and neither his friends or mine went into the streets, but to inquire,—“*how was the health of my son?*”

Twenty thousand persons, with their heads uncovered, preceded by the Governor and magistrates of the city followed his remains to the cemetery,—an honor never before conferred on any other person. His students bore the coffin on their shoulders. The whole city was in tears.

Since that sad event my two other sons and myself no longer live. I write two letters each day to those dear children, and receive from them the same number. You can easily conceive what is the import of these letters. We speak but of our affliction and sorrows.*

Since the last letter which I had the honor of writing to you, at the close of that severe indisposition under which I so long suffered, I have been out only once, and that was to visit my new gardens.

I salute you, my much esteemed and honored friends, and am with sincerity, your most ob't servant,

J. B. VAN MONS.

Gen. H. A. S. DEARBORN,
WILLIAM KENRICK, and
ROBERT MANNING, Esqrs.

* Doct. Charles Van Mons, Chief Physician of the Hospital of St. Peter and of the Civil Prisons, Clinical and Pathological Professor of the University of Brussels; and member of numerous European scientific and literary societies.

[From the Franklin Farmer.]

It always affords us pleasure to lay before our readers such communications as the following; they impart information which every farmer should possess. Like our neighbor Scott, however, we find the author labors under a wrong impression as regards the premium offered by the Editor of the Farmer; and for his information, will repeat, that the Editor's cup was offered for the best acre of *common corn* exceeding an acre of *Baden corn*. So that, to obtain it, he must now measure an acre of his *common corn*, and if its product is greater than an acre of *Baden* which we will mention, (and we will name his acre yielding the greatest quantity,) he shall have the cup.

There are many intelligent farmers who agree with the writer, that the top ears of corn are not always best for seed; indeed, we believe the majority prefer those that ripen first and close up best, whether they grow at the bottom or top; but think he need entertain no fears that his corn will either all run to stalk or grow too tall to be gathered, by selecting the top ears for seed. Such an occurrence is more likely to be brought about by pursuing the mode practiced by him this year, of planting too thick, than in any other way.—*Pub.*

HORSE-SHOE BOTTOM, KY. Nov. 15th 1838.

To the Editor of the Franklin Farmer:

DEAR SIR:—Since I commenced gathering my *Baden corn*, I find it yields me a much more abundant crop than I had anticipated. So much so, that I have had one acre in two different fields measured, and if I am not too late, offer them for the Editor of the Franklin Farmer's premium, or for any other premium offered for the best crop of corn. The ground upon which the corn was grown is Cumberland river bottom. That upon which was raised seventy nine bushels and one half pint to the acre, is a light sandy soil, very much worn, having been cultivated in corn without a change of crop for at least twenty years, until last year, when it was sown in oats. A part of the ground was turned under last fall with one of Waggener's hackney ploughs—the balance last spring with the same plough. It was planted about the 10th of May in hills four feet each way, ploughed four times with shovel ploughs, hoed, thinned (to two stalks to the hill,) and suckered twice. That upon which I raised one hundred and thirty bushels, one gallon and one quart, was an old field, pretty well worn out, the soil a deep black loam and restored by clover—had been in clover for seven or eight years previous. Last fall I turned it under about ten inches deep with Waggener's hackney, and in the spring, with the same plough, threw two furrows together, planted my corn about the 12th of May, three feet one way and from twelve to eighteen inches the other, leaving two stalks to the hill; ploughed it three times with shovel plough the first ploughing receiving a gofer* next corn, hoed it twice and suckered it once, was all the cultivation it received.

* The cling-stone varieties of the peach are not considered worth cultivating in Europe, as an edible fruit.

My drilled corn was decidedly too thick; had I planted it four and a half feet by twelve inches, and left only one stalk instead of two, I think I would have had a more abundant crop. After ripening more than half the stalks fell, not being able to bear their burthen. My rows were planted as near North and South as the situation of the ground would admit.

I am of opinion that mistaken notions generally exist as to the best method of selecting seed—that is in selecting the top ear. My corn all grew too tall; and if in corn, (like beans, melons, pumpkins, cucumbers, &c.) by selecting and planting the top ear, you make the corn grow taller, it is a bad plan; we will soon have our corn so tall that it will all tumble down; and if it does not, it will grow so high we cannot reach the ear on it, and may possibly, all run to stalk and have no ear. There is no doubt but in beans, &c. we may select seed from the tip of the vine until we make the vine run almost to an indefinite length before it will bear.

Yours, respectfully,
W. M. GREEN.

HORSE-SHOE BOTTOM, Russel Co. Ky. Nov. 14th, 1838.

Being called on by William M. Green, to measure the ground and one acre of Baden corn, we do state, that we measured the ground accurately, on one acre in two different fields—one field planted in the usual way, the other drilled—and after measuring the ground and counting the rows, we gathered one row and shelled the corn; the acre planted in the usual manner making seventy nine bushels and one half pint—the drilled acre making twenty four barrels, three bushels, one gallon and one quart. We also state, that we believe the corn suffered much from the drought, and that it would have yielded much more had the season been as good as usual. Given under our hands.

LEWIS HARMON.
H. L. GREEN.

N. B. The acre yielding seventy nine bushels and one half pint was on the poorest and thinnest ground in a field of about twelve acres, and the best part of the corn had been gathered before we were called to measure it. We believe the average crop on that field was at least eighty five bushels per acre.

LEWIS HARMON.
H. L. GREEN.

* *Gofers* means a small hill.—The word is not often used in Kentucky, but is quite common in Illinois with farmers ploughing the prairies.—*Pub.*

LUCERN.

The annexed essay is extracted from a French Agricultural Magazine, in the belief that it might be interesting to our readers. Our respected correspondent, John Lowell, Esq., has been successful in the cultivation of this grass, and speaks of its advantages and value, in strong terms of approbation. We can have no higher authority; and as we believe always that "what man has done man can do," we recommend strongly to all those who have failed, farther trials and longer perseverance. Many have failed in their attempts to cultivate it; and ourselves among the number. The next difficulty has been that the weeds have over-
* *received* it. It has been recommended to sow it in

drills and hoe and weed it as you would any other drilled crop. The habits of our farmers are utterly averse to all such methods of cultivation; but we are satisfied that the value of the produce would amply repay almost any labor, which it might demand. Of the value of ashes here commended as a manure, too much cannot be said. One of its pre-eminent advantages as a manure is that it destroys insects and produces no weeds. Lucern demands rich land and clean culture. Old lands therefore abounding in the seeds of weeds, or green barn door manure, full of the chaff of the barn floor, must be avoided. We shall consider this subject fully in another place. H. C.

(Translated from the French Cultivator by CH B. Breck.)

ON SOWING LUCERN.

A good lucern field is an indisputable benefit for a farming establishment; on the other hand the careful preparation and hard labor which its cultivation demands are expensive; the length of time before it becomes productive, and all the precautions necessary to assure its success, are important and useful to be known.

Lucern (*medicago sativa*) should be sown generally alone, or in a crop of grain in March or April; or with maize or Indian corn, to be cut for forage. This last will be up soon enough to receive its first weeding by means of which the ground will be smoothed and cleared of all grass and weeds.

Some theoretical farmers prefer sowing lucern with buckwheat, planted with which, the artificial meadows succeed admirably, and so wait till the month of June. Whatever mode may be adopted, this seed ought to be sown in land well dug, not moist, the lumps of earth well broken to pieces, and previously manured.

In order to succeed, the time when the seed ought to be sown is not a matter of indifference; thus it is well to take advantage of a cloudy day, when it seems likely to rain. The seed should be sown in the quantity of 20 lbs. to the acre, and if it is possible the harrow or the roller should be passed over it; but one has not always the power of using all the means of success. Some often fear in passing the harrow over it, that the feet of the oxen or horses employed in drawing, should force the seed too deep into the soil.

If one should undertake to do it with hand rakes drawn by men or women there might not be time enough; and it may happen that at the moment when the seed is sown, the condition of the grain crops with which it is sown, opposes itself to all these operations; or the land is too wet, or a rain falls on it before we are able to cover the seed in the least, which is always necessary, and without which, besides its becoming the prey to a multitude of little insects or birds also, it is exposed to be dried up by the sun after having begun to germinate. I avoided all these inconveniences, and all the troubles of raking by a very simple method. I had saved at the farm-houses and at my own, the ashes that had been used for lye. I had them first spread out at home, and when they were dry, I had them carried into a shed, to use in time of need. If I have any lucern to sow, I have recourse to them. I scatter them over the seed, which not only covers it up, but even protects it from the ravages of many insects or bugs, which the ashes drive off.

After having proved the good effects of the ash-

es employed in my kitchen garden for different seeds, I have thought it would be very useful for preserving other small seeds in sowing time. It is in order to avoid expense which the use of crude ashes would occasion. When I have not had a sufficient quantity of ashes for domestic purposes, then I have ordered the head servants to reserve all those which are useful for lye, and have used instead of ashes, loads of sand, which will also without doubt cover the seed as well, and without expense; but they will not be so good a stimulant of vegetation, nor afford so good a shelter or protection to the seeds. Besides, the ashes are so fine and the parts so disunited, that they cover the seed much better. I use ashes also, when I have a plenty, in a great many other cases; grains sowed for the purposes of forage, and for which the head servants use the best manures, to the injury of the land destined for the production of grain.

Lucern comes up about 15 days before the trefoil or sanfoin, and at the same time the carnation trefoil that Roussillon calls *farrouch*. When it is well situated to receive the rays of the sun, and when the rains come seasonably, it furnishes successive crops, which constitute a great resource for the nourishment of cattle; it is one of the most useful among foraging plants; and for the production of it, no means of successful cultivation should be neglected.

FENCE MAKING.

All worm fences made, or repaired, if placed on rocks last almost doubly as long, as when laid on the soil, especially on a rich loam, in a very few years the second course of rails are on the ground, while those placed on rocks remain sound—the philosophy is plain, the wood has an affinity for the earth, worms, moles, &c. work under the rail, while the earth under the rock, becomes firm; worms and the smaller animals, do not burrow under them as much as under wood, especially when in a state of decay. All the time spent in putting rocks under the fence corners, if the rock is near will soon be paid with interest by the durability of the fence. C. Farmer.

STRETCHES IN SHEEP.

Conversing the other day with friend Paine Wingate upon this disorder, he gave it as his opinion that the first cause of it is costiveness. When sheep come to the barn, and a change takes place in their diet from green to dry food, a costive state of the bowels is produced; an inflammation in the small intestines takes place, especially where they unite with the colon or large intestine, and oftentimes an enlargement will ensue. When any substance passes this spot it causes severe pain, and the sheep manifests it by the act of stretching. Once when dissecting a sheep that had died of this disorder, he found one intestine had shut into the other, which produced death. He generally relieves it by giving green succulent food, such as turnips, potatoes, cabbages, &c. Such diet he thinks will prevent it entirely.—*Maine Farmer.*

FEEDING CATTLE.

Order and system should be inscribed on every thing that a farmer has, and practiced in all that he does, but it appears to be more especially necessary in his attention to his domestic animals

my corn about the 12th of
leaving from twelve to eigh-
times with shovel plough,
receiving a gofer* next
suckered it once,
t received.

han in any thing else. Their food and drink should be the first objects of his care: not only in sufficient quantity and of proper quality, but given to them at proper times and with the greatest possible degree of regularity. When cattle are first put into the barn, they need the best of hay and regular attention. Their appetite for hay is not so keen as it is in the coldest of weather; consequently, the ordinary hay, potatoe tops and coarse fodder, should be reserved for mid winter, when they will eat it up clean. Cattle that are well fed when they are first put up, will go through the three winter months on very ordinary keeping, without losing much flesh. Every farmer should reserve roots enough to give each of his cattle a small quantity every day through the spring months. It will prevent many of those complaints to which cattle are liable in the spring, from being kept so long from the ground and fed on dry fodder.

No more than an animal will eat at the time should be put before him, for after he has once refused it nothing but the utmost extremity of hunger will induce him to eat it. We know a man who would spoil a fine horse in six months by irregular feeding. He never drove very hard, but would sometimes put before his horse three times as much hay and grain as he would eat, and perhaps neglect to water him for one or two days; and at other times, he being engaged or absent from home, his horse would get nothing to eat for 24 hours; and then again he would put twice as much before him as he needed at that time, and let him remain until he would eat it up. A horse tended in this way will soon lose both flesh and spirits.

Cleanliness, too, is necessary to promote the health and comfort of animals—without it you can hardly keep them in tolerable condition by feeding them well. As soon as cattle and horses are put up in the fall, they should be carded and brushed every morning. Experienced farmers have told us that cleaning a horse every morning would keep him in better condition than adding four quarts of oats to his daily feed without cleaning him.

Salt is an indispensable article for animals as well as man, and should be given to them regularly once a week at least. In fact, let order, and system be your motto in all your operations.—ib.

THE MARYLAND SILK COMPANY OF BALTIMORE

Offers for sale 25,000 genuine *Morus Multicaulis* trees, 20,000 *Alpin*, *Canton*, and other varieties.
d 25 L. J. COX, President.

THE ORANGE FARM.

This highly improved Farm situated two miles from this city on the Philadelphia Turnpike road, is offered for rent. It contains about 300 acres of land; in the improvement of which no expence has been spared for many years. In addition to a large quantity of barn yard manure, ashes, &c. 25,000 bushels of lime have been advantageously spread within the last four years. The improvements consist of a plain DWELLING with ample accommodation for labourers, a costly Switzer Barn, stables for one hundred Cows, a well arranged and extensive dairy, Ice House, Steaming Room with boilers complete and every accommodation for a dairy farm on the most extensive scale. The House, furniture, farming utensils and horses will be let with the farm.

S. W SMITH.
a 29 15t Monument Square, Baltimore.

MORUS MULTICAULIS, OR GENUINE NEW CHINESE MULBERRY.

A large stock of best SOUTHERN raised, lately put into the hands of the subscriber for disposal, at 30 dollars a thousand for buds, and 20 cents a foot for main stem and root, and discount for large trade, say 5 per cent. for 500 dollars worth, and 10 per cent. for 1000 dollars or more. But as the price is still rising (now 4 cents a bud in many places) owing to the very inadequate supply for the increasing demand, it is suggested, that to prevent disappointment, those not immediately applying to secure at above prices, should expect an ADVANCE, and say in order, AT GOING RATES. Again: as the season is advancing, and little time for negociation as to distant deliveries against early (best) time of spring planting, it is stated that no quota is to be forwarded until payment FIRST made or SECURED at place whither ordered; say HERE, Enfield, Halifax, Petersburg, Cheraw, Charleston, Baltimore, or any place in our country accessible by water or rail road conveyance.

SIDNEY WELLER.
Brinkleyville, Halifax county, N. C.
Jan. 29, 1839. fe 5 2t

AGRICULTURAL IMPLEMENTS.

THE Subscriber acknowledges with gratitude the liberal patronage he has received from the public since the establishment of his Repository in 1825.—During this long period he has studied successfully his own interest by identifying them with the interest of his customers in being prompt and faithful in the execution of their orders.

His present facilities of manufacturing agricultural implements, are not surpassed by any other establishment in this country, he can therefore afford them on as reasonable terms as any other person for the same quality of work. His present stock of implements are extensive both in quality and variety, to which he would invite the attention of those who wish to purchase.

A liberal discount will be made to all cash purchasers, and to those who purchase to sell again.

The following names are some of his leading articles viz: His *PATENT CYLINDRICAL STRAW CUTTERS*, wood and iron frames, but all with his patent double eccentric feeders, with or without extra Knives, prices varying from \$33 to \$110, subject to cash discount, he challenges the world to produce a better machine for cutting long forage, Myer's *WHEAT FAN* and *ELLIOTT'S PATENT HORIZONTAL WHEAT FANS*, both a very superior article. Fox & Borland's *PATENT THRESHING MACHINES* and Martineauls *PATENT HORSE POWERS*, also superior articles.—A great variety of *PLOUGHS*, wrought and cast Shares, of all sizes and prices; Gideon Davis's improved *PLOUGHS*, of Davis's own make of Patterns, which are sufficiently known to the public not to require commendation; 100 *CORN CULTIVATORS*, also expanding *CULTIVATORS*, both iron and wood frames, and new plan; *TOBACCO CULTIVATORS*.

F. H. Smith's *PATENT LIME SPREADERS*, the utility of which has been made known to the public; together with a general assortment of *FARMING IMPLEMENTS*; *PLOUGH CASTINGS* of every description and superior quality kept constantly on hand at retail or by the ton; also, *MACHINE* and other *CASTINGS* furnished at short notice and on reasonable terms, his iron Foundry being furnished with the best materials and experienced workmen with ample machinery running by steam power for turning and fitting up machinery.

ALSO—Constantly on hand D. Landreth's superior *GARDEN SEEDS*—In store *POTATOES* and common *SEED OATS*, *TIMOTHY* and *HERDS SEEDS* all of superior quality.—All orders will be promptly attended to.

JONATHAN S. EASTMAN,
Farmers' Repository, Pratt street,
Near the Baltimore & Ohio Rail Road Depot.
fe 5 tf

SEEDS, PLANTS, FLOWERS.



The subscriber offers for sale at his establishment a fresh supply of *GARDEN SEEDS* of the very best quality; those that cannot be grown in this country he imports direct from Europe from a source that can be relied on.

Besides a large collection of *GREENHOUSE*, hardy *ORNAMENTAL TREES* and Shrubs, Herbaceous Plants, and

Bulbous Roots, and a choice collection of the very finest double Dahlias offered for sale, all on reasonable terms, wholesale or retail.

Also on hand a few bushels of *ITALIAN RYE GRASS*, with 100 bush. *ITALIAN SPRING WHEAT*, of the true kind. All orders for Fruit and Ornamental Trees, or any thing appertaining to his establishment will be strictly attended to, by

JOHN FEAST,
Florist & Seedsman, cor. of Lexington and Pine sts.
ja 22 tf Baltimore.

FOR RENT,

A lot of ground, containing 12 acres. It is situated near the York Road, a short distance this side the first tollgate. It has on it two comfortable frame dwelling houses, and extensive and convenient arrangements for cows and horses, with a pump of excellent water. The soil and situation have been said by persons engaged in the mulberry and silk business, to be admirably suited to that branch of agriculture. The advertiser would give the land and improvements, to a person who might wish to embark in that business, for a reasonable share of the profits, the renter to be at all expence, and give his personal attention. The stabling, &c., could at a trifling expence be converted into coconneries. Apply at the office of the Farmer and Gardener. fe 6 3t

SPLENDID BLOODED STOCK FOR SALE.

The proprietor of Covington farm will dispose of the following fine bulls on reasonable terms, viz.

One bull two and a half years old.

One do. six months old.

of the improved *Durham short horn breed*; the dam of the first was got by the celebrated bull Bolivar; for size, form and beauty they are not surpassed by any animal in the state.

Three *Devon Bulls*, one of which is seven years old next spring, and the largest *Devon* in the State. The *Devons* are from the stock of the late Wm. Patterson, and of undoubted purity.

Two half *Devon* bulls.

Two bulls half improved *Durham short horn*, and half *Devon*.

One splendid bull, a cross of the *Bakewell*, *Alderney* and *Devon*.

One bull, half *Alderney* and half *Holstein*.

These fine animals may be seen at Covington farm, near Petersburg, Frederick county, Md. on application to James L. Hawkins, Baltimore, or to

se 11 f FREDERICK F. ERT. Manger.

TO THE PUBLIC.

Try the New Agricultural Establishment in Grant-street, next door to Dinsmore and Kyle.

Every article warranted to be first rate. The subscribers, grateful for past favors, take this early opportunity of returning their thanks to their customers and the public in general, and beg leave to inform them that they are now provided with a very extensive stock of newly manufactured *AGRICULTURAL IMPLEMENTS*, suitable to meet the call of Farmers, Gardeners, Merchants, Captains of vessels, and others, viz: 1000 *Plooughs*, assorted sizes, from \$4 to \$15 each, comprising of the old common Bar Shear, Winand's Self Sharpener; Woods & Freeborn's patent, all sizes, "Davis", "Sinclair & Moore's" improved Hill Side *Plooughs*, highly esteemed for turning the furrow down hill, with wrought or cast shears; *Wheat Fans*, of various sizes and patterns, from \$15 to \$50 each, warranted to separate the garlic from the wheat; *Corn Shollers*, from \$12 to \$20; *Cutting Boxes*, from \$7 to \$50 each; *Corn and Tobacco Cultivators*, large and small; *Expanding do.*, *Wheat Cradles* warranted to have fingers of the natural growth, and *Grass Seythes*, &c. &c.; *Castings*, of all descriptions and patterns, by the lb. or ton, to suit customers, allowing a liberal discount to merchants buying to sell again—all of which will be furnished on the most pleasing terms and every article warranted to be of the best quality, in proportion to the cost price. All orders by mail or otherwise shall be duly attended to with the greatest despatch.

We have also connected in its operations with the above branch of business a complete assortment of *FIELD AND GARDEN SEEDS*, kept by Thomas Denny—Also *Garden and Farm Tools*, of various sorts and of the choicest collection, which will enable our customers to have filled entire all orders in the *Agricultural and Seed Departments*. mh 26 JOHN T. DURDING & CO

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every Monday

	PER	FROM	TO
BEANS, white field,.....	bushel.	2 00	
CATTLE, on the hoof,.....	100lbs	9 50	10 00
CORN, yellow.....	bushel	86	87
White.....	"	86	87
COTTON, Virginia,.....	pound	14	15
North Carolina,.....	"	13½	14½
Upland,.....	"	14½	15
Louisiana — Alabama	"	15	16
FEATHERS,.....	pound.	55	
FLAXSEED,.....	bushel.	1 69	1 75
FLOUR & MEAL—Best wh. wh't fam.	barrel.	10 00	10 50
Do. do. baker's.....	"	8 12	8 25
SuperHow. st. from stores	"	7 75	7 75
" wagon price,	"	8 25	8 25
City Mills, super.....	"	8 50	
" extra	"	5 50	
Susquehanna,.....	"	5 50	
Rye,.....	"	19 00	
Kiln-dried Meal, in hhd.	hhd.	4 00	
do. in bbls.	bbl.	14 00	15 00
GRASS SEEDS, wholes. red Clover,	bushel.	3 00	
Kentucky blue	"	2 00	2 50
Timothy (herds of the north)	"		3 00
Orchard,.....	"	90	1 00
Tall meadow Oat,.....	"	12 00	16 00
Herds, or red top,.....	"	6	7
HAY, in bulk,.....	ton.	8 50	8 90
HEMP, country, dew rotted,.....	pound.	7 75	8 50
" water rotted,.....	"	20	
HOGS, on the hoof,.....	100lb.	18	
Slaughtered,.....	"	32	33
HORS—first sort,.....	pound.	3 50	4 00
second,.....	"	48	50
refuse,.....	"	1	1 12
LIME,.....	bushel.	4 25	
MUSTARD SEED, Domestic, —; blk.	"	1 50	
OATS,.....	"		3
PEAS, red eye,.....	bushel.	100	103
Black eye,.....	"		none
Lady,.....	"	5 00	5 50
PLASTER PARIS, in the stone, cargo,	ton.	6 00	6 50
Ground,.....	barrel.	9 00	12 00
PALMA CHRISTA BEAN,.....	bushel.		10 00
RAGS,.....	pound.	10 00	14 00
RYE,.....	bushel.	10 00	15 00
Susquehanna,.....	"	12 00	15 00
TOBACCO, crop, common,.....	100lbs	6 00	
" brown and red,.....	"	7 00	9 00
" fine red,.....	"	6 00	10 00
" wrappery, suitable	"		
for segars,.....	"	10 00	20 00
" yellow and red,.....	"	10 00	14 00
" good yellow,.....	"	10 00	15 00
" fine yellow,.....	"	12 00	15 00
Seconds, as in quality, ..	"	6 00	
" ground leaf, ..	"	7 00	9 00
Virginia,.....	"	6 00	10 00
Rappahannock,.....	"		
Kentucky,.....	"	6 00	8 00
WHEAT, white,.....	bushel.		
Red, best	"	1 80	
Maryland	"	1 60	1 75
WHISKEY, 1st pf. in bbls.....	gallon.	44	45
" in hhd.	"	41	
" wagon price,.....	"	bbls	41
WAGON FREIGHTS, to Pittsburgh, ..	100lbs	2 00	
To Wheeling, ..	"	2 25	
WOOL, Prime & Saxon Fleeces, ..	pound.	50 to 55	
Full Merino,.....	"	45 50	
Three fourths Merino,.....	"	40 45	
One half do.....	"	35 40	
Common & one fourth Meri.	"	35 40	
Pulled,.....	"	30 33	
POTATOES, 60 to 70 cts. a bushel.			

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,.....	barrel.		
BACON, hams, new, Balt. cured....	pound.	15	
Shoulders,.... do.....	"	12½	
Middlings,.... do.....	"	12½	
Assorted, country,.....	"	12½	
BUTTER, printed, in lbs. & half lbs.	"	31	50
Roll,.....	"	25	31½
CIDER,.....	barrel.	1 75	2 00
CALVES, three to six weeks old....	each.	5 00	6 00
Cows, new milch,.....	"	25 00	40 00
Dry,.....	"	12 00	15 00
CORN MEAL, for family use,.....	100lbs.	2 00	2 12
CHOP RYE,.....	"		1 60
Eggs,.....	dozen.	37½	
FISH, Shad, No. 1, Susquehanna,	barrel.		
No. 2,.....	"		
Herrings, salted, No. 1,.....	"	6 00	6 25
Mackerel, No. 1, ————No. 2	"	11 50	13 50
No. 3,.....	"	7 50	
Cod, salted,.....	cwt.	3 25	3 37½
LARD,.....	pound.	12	13

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

		VIRGINIA.
U. S. Bank,..... par		Farmers Bank of Virgi. par
Branch at Baltimore,.... do		Bank of Virginia,..... do
Other Branches,..... do		Branch at Fredericksburg, do
MARYLAND.		Petersburg,..... do
Banks in Baltimore,.... par		Norfolk,..... do
Hagerstown,..... do		Winchester,..... do
Frederick,..... do		Lynchburg,..... do
Westminster,..... do		Danville,..... do
Farmers' Bank of Mary'd, do		Bank of Valley, Winch. par
Do. payable at Easton,.... do		Branch at Romney,.... par
Salisbury,.... 1 per ct. dis.		Do. Charlestown, par
Cumberland,..... par		Do. Leesburg,.... par
Millington,..... do		Wheeling Banks,.... 2½
DISTRICT.		Ohio Banks, generally 3
Washington, } Banks, ½ p.c.		New Jersey Banks gen. 3
Georgetown, } Banks, ½ p.c.		New York City,..... par
Alexandria, } Banks, ½ p.c.		New York State,.... do a ½
PENNSYLVANIA.		Massachusetts,..... 1½ a 2
Philadelphia,..... par		Connecticut,..... 1½ a 2
Chambersburg,..... ½		New Hampshire,.... 1½ a 2
Gettysburg,..... do		Maine,..... 1½ a 2
Pittsburg,..... 2½		Rhode Island,.... 1½ a 2
York,..... ½		North Carolina,.... 3 a 3½
Other Pennsylvania Bks. 2		South Carolina,.... 4 a 5
Delaware [under \$5].... 4		Georgia,..... 5 a 5½
Do. [over 5]..... 1½		New Orleans,..... 7 a 8
Michigan Banks,..... 10		
Canadian do..... 10		

FOR SALE,

A valuable FARM of prime soil, on the Western Run in Baltimore county, about two miles north west of the 14th mile stone of the Baltimore and York turnpike road, and at the same distance from the depot of the Baltimore and Susquehanna rail road, at Cockey's tavern, in a rich, highly cultivated and healthy tract of country.

This farm contains from 260 to 270 acres, having a full proportion in wood, much of which is building timber, peculiarly valuable in that neighborhood; is in the best state of cultivation; a considerable part in productive timothy meadow, and the residue of the arable land, not in grain, is well set in clover, the whole under good fencing, laid off into convenient fields, each of which is well watered. The farm has a large quarry of excellent building stone. There are on the premises an apple orchard of select fruit trees, which seldom fail to bear abundantly; a valuable mill seat on the Western Run, with a race already dug. There is no location in the country more favorable for a grist mill, having the advantage of a rich and thickly settled neighborhood, and a good public road leading thence to the turnpike road. Buildings substantial and convenient, being a STONE DWELLING, and kitchen of two stories; a large stone Switzer barn, with cedar roof and extensive stabling below; large hay house and stable for cattle; stone milk house near the dwelling, with a spring of fine never failing water, with other out-houses. On the country road near the mill-seat a good house and shop for a mechanic, under rent to a good tenant. It is well known the lands on the Western

Run are in every respect equal, if not superior to any in the county. Adjoining or near are the lands of Col. N. Bosley, Daniel Bosley, Thos. Matthews and others. The water power, with about 20 acres of land, is so situated that they may be detached and sold separately, without injury to the rest of the farm for agricultural purposes. Terms of sale will be liberal. Apply to

NATHANIEL CHILDS,
on the premises, or to
WILLIAM J. WARD,

oc 23 tf Fayette, near Calvert st. Baltimore.

FARM FOR SALE.

The subscriber has for sale a beautiful little Farm consisting of about 80 acres of land, in a high state of cultivation, having been occupied for several years as a dairy and market garden; it bounds on the eastern line of the city for nearly half a mile, and about the same distance on the Philadelphia turnpike. The improvements consist of a substantial two story dwelling house with two wings, barn, stable, poultry, spring and milk houses, and outbuildings. There is near the house a spring of excellent water, which empties into an ice pond.

The access to this property is by the Philadelphia turnpike, which is confessedly one of the best roads in the union, and from its contiguity to this city, being only 2 miles from the centre thereof, is a most desirable property. For terms apply to
ja 29 3t E. P. ROBERTS,
Baltimore, Md.

FRESH SUPPLY OF FIELD AND GARDEN SEEDS,

BY THOMAS DENNY, Ellicott near Pratt street, Baltimore, who has just received general supply of GARDEN SEEDS, the growth of 1838, part of which was raised by the first Seedsmen of this country, and a part imported, all of which will be sold wholesale and retail, upon the best terms, such as

GARDEN PEAS; Early and Late assorted Cabbage; Cauliflowers; Radish; Lettuce; Cucumber; Parsnip; Carrot; Onion; Rutabaga Turnip; Parsnip seed of all kinds, Garden Beets assorted; French Sugar Beet; Mangel Wurtzell, &c. &c. Also Field SEEDS, such as Early Sugar, Early White, Sioux, Chin or Tree Corn; Dutton, Baden and Twin Corn; Red Clover; Luzerne and White Dutch Clover; Timothy; Orchard; Herds; Millet, Tall Meadow Oats; superior Weed Oats; Spring Wheat; Spring Rye; Spring Barley; Seed Buckwheat; blue and Kentucky Lawn Grass, &c. &c.

Also GARDEN TOOLS, assorted sizes, and late improved patterns; Bird Seed of all kinds, Double Dahlias; Hyacinths, and Polyanthus, assorted, and selected for beauty and richness of colours, together with choice Flower Seed, assorted; Mulberry Trees; Fruit and Ornamental Trees; Silk worm Eggs; &c.; Agricultural Books; Silk Manuals; &c. Rohan Potatoes—Early Seedling do. &c. All orders by mail or otherwise will meet with early attention and dispatch, on the best terms for cash.

ja 29

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SILK AGENCY,

Corner of E. and 7th streets, Washington City, D. C.

The subscriber having commenced an Agency for the purchase and sale of SILK MULBERRY TREES, and all articles connected with the growing of Silk, offers for sale the following varieties of Mulberry Trees at Baltimore prices, viz. Multicaulis, Alpine, Broussa, White Italian and Canton; also Mammoth White Silk Worm's Eggs, warranted to be of superior quality. All the recent publications on silk growing for sale, and subscriptions received for the various periodicals devoted to that subject.
no 20 J. F. CALLAN.

CHINESE MULBERRY TREES.

American Silk Agency, No. 95, Walnut st. Philadelphia

The subscriber having opened a permanent Agency for the purchase and sale of all articles connected with the culture and manufacture of Silk in the United States, offers for sale all the different varieties of MULBERRY TREES, suitable for raising the SILK WORM; viz: Morus Multicaulis Alpines, Brussa Multicaulis Seedlings, Morus Expansa, Multicaulis Cuttings, Improved Italian Trees, &c. Also, Cuttings from Norton's Virginia Seedlings, and Cunningham's Prince Edward GRAPE VINES. These vines produce an abundant crop of fruit, warranted not to rot or mildew and are fine for the table, and capable of yielding the finest wines.

S. C. CLEVELAND, Agent.

THE AMERICAN FARMER.

The proprietors of this paper have a few complete sets of this work on hand, which they will dispose of at the reduced price of \$50 a set.
oct. 16 3

THE FARMER & GARDENER

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, E. P. ROBERTS AND SAMUEL SANDS—EDITED BY E. P. ROBERTS.

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BALTIMORE, MD. FEB. 12, 1839.

Vol. V.

— This publication is the successor of the late **AMERICAN FARMER** and is published at the office, at the N. W. corner of Baltimore and North streets, over the Patriot office, at two DOLLARS AND FIFTY CENTS per annum, if paid within one month from the time of subscribing, or \$3 if after that time. All letters to be postpaid.

BALTIMORE: TUESDAY, FEB. 12, 1839.

THE INTERESTS OF AGRICULTURE.

As many of the legislatures of the states of this union are now in session, it appears to us that the occasion is a proper one to address some remarks to these several bodies, upon the subject matters which concern the interests of Agriculture. It is admitted upon all hands, that *agriculture* lies at the bottom, and forms the basis of every other branch of human industry. Without it, human societies could not exist in their civilized capacities—without it, the results of the arts and sciences would be valueless—and without it, the triumphs of mind over matter would be deprived of their noblest incentives to action; for man in a state of nature looks not beyond the pleasures of the chase, or the mere gratification of his animal desires, passions and wants. It was the products of *agriculture* which, by creating the necessity for, gave birth to, commerce, and ultimately led to the development of those higher powers of man's intellect, the evidences of which are to be found in all civilized communities, and which stand forth in bold relief, as so many trophies of his greatness—so many monuments of his ingenuity. The institution of commercial marines grew out of the necessities which existed for mediums of conveyance for the surplus products of the land from one people to another; so also, do roads, rail-roads, canals and steamboats, owe their creations mainly to the demands which the surplus products of the soil made for the means of transportation between extreme points of the same country, and between different nations. Indeed, were we to trace the effects produced by agricultural industry to their causes, we might claim for it the honor of being the parent of all those improvements in governments, which elevate man in civilized communities so far above the rank he occupies as a tenant of the woods.

Claiming then, as we do, for *agriculture*, a station so pre-eminent, it must be considered a mat-

ter of profound surprise, that governments, and especially in this country, have done so little to promote its interests. This surprise, however, will cease when the unobtrusive character of agriculturists are considered, and the difficulty of obtaining any thing like justice from rulers, unless it be backed by importunate demands. *Public opinion*, which is not unfrequently *manufactured*, must be made to appear to demand the adoption of a project before it can be expected to find even the least favor with bodies, which, in their search after *popularity*, sometimes lose sight of the *true interests* of communities. Is a measure *popular*? is, unfortunately, the question too often sought to be solved by the politician, while the more becoming ones—is it expedient?—is it politic?—is it proper? are forgotten, or overlooked in the scramble for *popularity*—for that pseudo popularity, which like the snail never dreams of emerging beyond the reach of its own slime—which turns a deaf ear to the dictates of conscience—which denies to judgment the influence so justly its due, and bows in inglorious submission to the *dicta* of unchastened passions, and unhallowed prejudices, regardless of the inflictions they may impose upon, or the prosperity and happiness they may deny to posterity. These remarks are not directed against any particular individuals, parties, or nations; but apply equally to all; nor are their applicability confined to the present time; for it is a melancholy truth, that the same state of things have existed since the earliest periods of history, as is attested by the fall of empires and the destruction of republics. To the predominance over the minds of men of those disastrous influences, may we ascribe the *butcheries* which so stain the annals of France, and make the patriot blush when he reflects that by such means her revolution was achieved. Greece and Rome, too, once so renowned for being the seats of the arts and sciences, and for their republics—whose names are so dear to genius and to liberty—by succumbing to popular impulses, became despoiled of their greatness and splendor, and furnish at the present day the most melancholy contrasts of what they once were. England, also, in many periods of her history, affords the unerring evidence of the prevalence of the same blighting spirit; nor was it con-

fined to the arenas of pot-house politicians; but found its way into the senate house—into the very temple of legislation. Many of our readers will recollect the beautiful definition which Lord Mansfield gave of *popularity*, and the withering parallel he drew between the *popularity* which should be the object of the *patriot's* ambition, and that which was the idol of the *demagogue*. It is to be found in the speech of that enlightened statesman and profound jurist, delivered in the House of Lords in 1770, on the bill for the further preventing the delays of justice, by reason of the privileges of parliament. Upon that occasion, he stood forth the champion of the people's rights, and called down upon him the imputation of being running the race of popularity—an imputation, which being unjust, aroused his indignation, and was thus repelled by him:

"I come now to speak upon what, indeed, I would have gladly avoided, had I not been particularly pointed at, for the part I have taken in this bill. It has been said by a noble Lord on my left hand, that I likewise am running the race of popularity. If the noble Lord means by popularity, that applause bestowed by after ages, on good and virtuous actions, I have long been struggling in that race; to what purpose, all-trying time can alone determine; but if the noble Lord means that mushroom popularity, that is raised without merit, and lost without a crime, he is much mistaken in his opinion. I defy the noble Lord to point out a single action of my life, where the popularity of the times ever had the smallest influence on my determinations. I thank God, I have a more permanent and steady rule for my conduct, the dictates of my own heart. Those that have foregone that pleasing adviser, and given up the mind to be the slave of every popular impulse, I sincerely pity; I pity them still more, if their vanity lead them to mistake the shouts of a mob, for the trumpet of fame. Experience might inform them, that many who have been saluted with the huzzas of a crowd one day, have received their execrations the next; and many who, by the popularity of their times, have been held up as spotless patriots, have nevertheless appeared upon the historian's page, when truth has triumphed over delusion, the assassins of liberty. Why, then, the noble Lord can think I am ambitious of *present popularity*, that *echo of folly*, and *shadow of renown*, I am at a loss to determine."

Can any intelligent statesman, whose object is his country's good, read this withering parallel, without feeling his pulse quicken—without having his disgust excited, while he contemplates the

doings of the mere time-serving politician? Can he behold with composure the flimsy pretensions, the shallow professions of those, who with the cry of love for the people on their lips, omit the performance of any thing calculated to confer solid and lasting benefits upon them? We think not,—and we call upon all who are charged with legislative trusts, to come together as patriots, forgetful of the ties of party, and act for their country; for that country which in all time to come is to be the shield and support of themselves and posterity—by thus acting they will earn for themselves a monument more durable than marble, for it will be the undying gratitude of a free and generous people.

We will now turn our attention to those measures, which we think ought to be done to advance the interests of husbandry.

1. PATTERN SCHOOLS.

Each state should institute one or more *pattern schools*, wherein the science and practice of agriculture, in all its branches and pursuits, should be taught, and without entering into details at this time, we think such establishments could be supported without burthens the respective treasuries of the several states with any thing but the first outlay.

2. PROTECTIVE LAWS.

In most of the states the farmer and planter is left without any adequate protection to his growing crops, orchards or forests. Indeed, as the law now stands, it not only serves to shield the dishonest from punishment, but acts as a positive incentive to him to perpetrate his villainies. This may appear a round declaration—a broad assertion—but startling as it may be, it is nevertheless, unfortunately true. How stands the law? Why, as the law stands, in a large majority of the states, it is not a *criminal* offence for any one to go into another's corn-field, and if he so please, to pull and carry off all the corn he may find on the standing stalks: if he finds the stalks standing in the earth in their growing position, he commits no *legal crime*, though he carry the entire crop off, provided he can do so, after pulling off the ears without leaving the premises. If, however, after pulling the ears, he should *quit* the premises, and return to carry off his spoils, then the *taking away* is a crime for which he may be prosecuted, and if found guilty, be punished as a *felon*. But if he be caught in the act of pulling with the intention of carrying away, without having left the premises from the beginning of his unholy work, it is *not* an act of *felony*, but a mere *trespass*, and the same is only subject to an action of damages. Again there

is another *fiction* of the law. If the owner of the corn shall have cut up his cornstalks by the roots, and they are carried off, because they were no longer *attached* to the freehold, it is a felony to take them away. These are *distinctions*, so finely attenuated, that we confess we cannot perceive the propriety of their differences. What does it matter in a pecuniary point of view to the honest farmer, who may have labored from spring till fall in the culture of his corn, whether he be deprived of the fruits of his labor *after* or *before* he had pulled the ears of corn from off the stalks? Nothing; the loss to him is equally great, and the *moral enormity* of the crime is the same in both cases; the *intention* to do wrong being alike present in each.

We know an instance in which an unhappy wife and mother was sent to the penitentiary for stealing a few mackerel to appease the hunger of her children, her husband being in gaol for *debt*. She had first asked for them on credit, and being denied, seized the opportunity afforded by a crowded shop to steal them, and being detected in the act, was arrested, tried, and punished as before stated. We do not wish to plead as her apologist; for we hold it, that there are no circumstances that can occur that will justify acts of theft—the right of property should be held inviolate, and all infractions punished. But we would respectfully ask, is there any *equality of justice* in that code of criminal law, which almost justifies a ruffian *man*, in taking from the industrious, the fruits of their labor, and consigns a friendless mother to a loathsome and ignominious prison, for taking less than fifty cents worth of fish to save her children from starvation?

Again, if a dishonest and irresponsible wretch should be pleased, he may employ some forty or fifty hands; go into a farmer's forest and cut down and carry off the wood from hundreds of acres, and if he cuts down no more than he carries off each day, the only offence he commits, is a *trespass*—and how let us ask, is redress to be obtained from a being so lost to all sense of shame as the one in question? Let the *sufferer* bring his action, and the *trespasser* will laugh at his folly, besides putting him in for the costs, and thus will the ends of justice be frustrated. Let it not be said that the case cited is an *extreme one*; for it is one which did occur in this very neighborhood only a few years ago. We have before stated the case, but will recur to it, with a view of sustaining our position.

The late Mr. *Daniel Carroll* of Duddington, of Washington, owned in the immediate vicinity

of the southwestern limits of our city, seven hundred acres of woodland. It was, we think, in the winter of 1829 and '30, when we heard that a number of lawless men were engaged in cutting down the wood and bringing it to town for sale, not only without leave, but that they had absolutely driven off the agent, and defied his authority. At that time we were engaged in conducting a daily paper, and feeling indignant that such outrages should be permitted almost in our midst, we prepared and published a paragraph suited to the occasion, singling out, without naming him, one of the parties, who we understood had *forty* woodcutters and carters engaged in this unrighteous work—though there was no *name* given, the graphic description was sufficiently faithful to reach the sense of identity of the guilty wretch, and as we expected he would, he paid us a visit. We were sitting alone in the office between 12 and 1 o'clock on the night following the appearance of the paragraph, when the *employer* and one of his hands, as we supposed, came in, and the following scene ensued.

The wood stealer, [in a loud and angry tone.] "I understand you have got an attack in your paper of this morning against me."

Handing him the *file*, and pointing out the paragraph to which we knew he alluded, we observed,

"This is the *paragraph*, which I presume you mean, and if you are the scoundrel who has been stealing Mr. Carroll's wood, it was written for, and does allude to you."

He very coolly read the paragraph, and observed—"I thought I would call and see it," and then as coolly walked off.

The consequences of the vitiating tendency of the law, proved fatal to Mr. Carroll's interests; for in despite of all he could do through his agent, these wretches continued to cut down his wood, and absolutely carried off in open day light, thousands of cords; and as for redress, that was out of the question. We ask the enlightened and virtuous of the land, whether the law should be left in this disgraceful condition? Is it not humiliating to the pride of America, that her criminal law, instead of providing for the protection of the property of her citizens, and the punishment of offenders, should furnish an invitation, in the first instance, to the perpetration of crime, and secondly, erects a panoply of protection around the wrong doer.

We are happy to perceive that the subject is about to be brought before the legislature of Maryland, in a *partial* form, by the friends of the Silk

culture, who we learn will ask for an amendment of the law, so as to make the taking up and carrying away of the Mulberry tree, an offence punishable as *felony*. We shall be gratified to see even this wholesome amendment made; but viewing the law not only defective, but pernicious and demoralizing in its tendencies, as it now stands, we should rather see a *general* cure of the evil. All *forests, growing crops* of all kinds, *orchards* and *garden vegetables*, should each and all receive the protection of the law, and the taking away of each, or any, should be made a *criminal offence*, punishable either as a *felony*, or *misdemeanor*, and be visited with fine and imprisonment.

At this incipient stage of the silk culture, the interests of the country require that all possible encouragement be given to the patriotic individuals who may engage in it, and from the experience of the last season, it is especially proper that *depredations* upon the *Multicaulis* and other Mulberry trees, be severely punished; for so reckless of consequences—so bold and daring did they get, that they besieged the guards appointed by one gentleman in the vicinity of this city, and only let fall their booty after an exchange of shots.—When things have arrived at such a pass, we think it behooves the guardians of the morals of the community to apply a remedy. If men were as they ought to be, harsh or restrictive measures would be unnecessary; but as the exigences and condition of society are the criteria by which lawgivers should act and judge, it is their business to legislate against the prevention and punishment of existing evils. The citizen should be protected in his property, and every effort to deprive him of it by violence or fraud, ought to be *punished*; no *toleration* of, much less *invitation* to, the perpetration of crime, should longer stain the criminal jurisprudence of our country. If the idle, the dissolute and the dishonest, are longer permitted to prey upon the honest and industrious, enterprise will be deprived of its greatest inducement to exertion, and the march of improvement will be arrested in its beneficent course.

AGRICULTURAL SOCIETIES.

It appears to us that each state who have not already done so, should pass some general law for the encouragement of the formation of Agricultural Societies. Massachusetts, with a foresight and patriotism worthy of all praise, has already led the way in this generous work. She some years since passed a law authorizing the officers of any Agricultural Society which might thereafter be organized, or which might at the time

be in existence, to draw upon the Treasury of the State for a sum equal in amount to whatever should be raised by the individual contributions of members of such associations, which said joint amounts were to be distributed in premiums.—The beneficial effects of this law are to be seen in every direction throughout that State, in the increased attention of her husbandmen to the pursuits of agriculture—in the increased products of their farms, and in the greatly improved condition of the soil.

PREMIUMS.

It is known to every farmer and planter, that the *Hessian Fly*, *Chinch Bug*, the *Grub Worm*, the *Cut Worm*, *Turnip Fly*, or *Flea*, the *Grasshopper*, and various other species of the insect tribe, annually prey upon and destroy large portions of the products of the earth, and produce great inconvenience and loss to the agricultural community, and that as yet no efficient preventive or remedial means have been discovered. So great indeed have the devastations of the Hessian Fly been known to be sometimes, as to lessen the yield of the wheat crop fully one-third; nor have the injuries of the other enumerated *enemies* to agricultural industry been much less fatal. When such is the case, it would seem reasonable that the citizen has a right to look to the State to offer such premiums, as will, by their amounts, make it an object with men of science to devote their time to the discovery of some means, which will preserve the husbandman from attacks of such insidious and destructive foes. Individuals, in our country, have not the pecuniary ability to set on foot such researches as are calculated to produce the desired end, and therefore, as the wealth of States consists in the productive resources of the citizens, it behoves them to extend that aid, which it must be obvious is beyond the reach of individuals.

ENCOURAGEMENT TO THE SILK CULTURE.

Upon this head of the subjects upon which it has been our purpose to dwell, we would ask to be indulged with some freedom of remark, as it is one near and dear to our heart. In its behalf we have long labored with a singleness of purpose and a zeal which *adverse fortune* could not repress, and it is not a little grateful to our feelings to find that the tide of *popularity* has begun at last to set so strongly in its favor, as to promise the *barque* a safe voyage over the shoals and quicksands that heretofore presented obstacles, which threatened destruction ere she should reach her destined haven.

The American people may be said to be but

just now, as it were, entering upon the *silk culture in earnest*; for although as early in our colonial history as 1623, King James I. took a very lively interest to introduce it into this country, and did succeed to a certain extent; still there have always been impediments in the way of its extensive spread. In the year we have named, having been convinced that, owing to the humidity of the climate of England, it never could profitably succeed there, that monarch, with the most laudable intentions, animated with the desire of encouraging the raising of Silk in his American colonies, sent out a quantity of silk worm eggs and Mulberry trees to Virginia, together with directions, so as to enlighten the inhabitants upon the mode of managing the worms. And to further his object, the Earl of Southampton, was instructed to encourage the cultivation of silk in the Colonies in preference to *tobacco*. Carrying out these views, and in obedience to instructions received from the Earl of Southampton, in the same year, we find the Colonial Assembly of Virginia, enacted a law compelling the inhabitants to plant a given number of trees. In 1656, they went still farther, and after describing the culture of silk as the most profitable commodity for the country, a penalty of three pounds of tobacco was imposed upon every planter who should fail to plant at least ten Mulberry trees for every hundred of acres of land in his possession; premiums were subsequently given, and some progress made in the business; but the *failure* is thus accounted for by Joshua Gee, an intelligent writer, who published a work upon "*the trade and navigation of Great Britain*" in 1760. After narrating the means taken by James I. to introduce the silk culture, he observes, in substance, that after some small progress had been made in Virginia, and the home government were of opinion that they had engaged the planters to begin the culture, instead of promoting it heartily, and sending able and skilful persons to direct the then new undertaking, they threw the whole responsibility, labor and expense, upon the planters, and the noble design was permitted to fall through for want of that paternal care so much needed, and which the colonists had every right to believe, from the early zeal manifested, would have been accorded to them.

Though the great object of the mother country was, by its own want of good faith, defeated, still more or less silk has been made here annually from that period to this, and the germs of the culture preserved through every vicissitude of fortune through which our country has passed.—

But within the last few years a new and abiding zeal has been unfolded, and men in every walk of life, are willing and anxious to lend a helping hand. Here we find a practical man unbending all the energies of his mind and body—there a capitalist unlocking his strong box to furnish the means—and such men are to be found in all the avocations of man; the hardy tiller of the soil, the industrious mechanic, the enterprising merchant, the members of the learned professions, lawyers and doctors, and the holy fathers of the church, are each and all vying with the other to advance this noble and thrice holy work—all animated by the same generous impulse. When we find then, the whole community as it were, pressing forward, with intelligent zeal and patriotic ardor, to establish a branch of industry, which, above all others, they believe best calculated to promote the happiness of the poor, improve the pecuniary condition of the rich, and add to the national wealth, it seems to us but reasonable that the State governments should yield to the general wishes of the people, and grant the aid which is asked for. *Massachusetts, Connecticut, Vermont, New Jersey, Pennsylvania and Delaware*, have already granted bounties on the raising of cocoons and the reeling of raw silk, and their citizens will continue to derive lasting benefits from them. What remains to be done is, that the other states in the Union should follow the noble examples here set them.

An application, we learn, is now pending before the legislature of this State, for the granting of similar bounties to such of her citizens as may engage in the business, for a limited number of years; and from the very favorable accounts we have heard of the high order of talents in the present legislature, we feel certain the application will prevail. There are numerous reasons why Maryland above almost every other State, should come forward in support of the culture of silk; and it shall be our purpose to enumerate a few of them.

1. There is no state in the Union whose soil and climate are more congenial, or better adapted to the growth of the mulberry, the healthful rearing of the worms, or where there are greater facilities for the fabrication of the raw material into goods of various kinds.

2. There is no state in the Union wherein there are, in proportion to her size, more exhausted fields, all of which by being appropriated to the silk culture, may not only be rendered profitable, but be made the means of enriching others.

3. As our neighboring sisters of the Republic,

have granted bounties, it would be a most fatal and suicidal policy in Maryland to withhold them, as there is nothing truer in political economy, than that *the facilities of trade always attract capital, and, therefore, if Maryland does not place the same inducements before her citizens as her neighbors have done, capital will flow from her to them, to her injury and their benefit.*

Situated as Maryland is, engaged in the laudable prosecution of great and important works of internal improvement, she can neither afford to lose her citizens, nor to have their capital diverted from her; true policy and enlightened patriotism both dictate that she should endeavor to multiply the number of the one, and increase the amount of the other. There are hundreds, nay, thousands of enterprising citizens of *Maryland* anxious to engage in the silk business, whose love for their gallant old mother, would render it desirable to remain and prosecute their business here; but it cannot be expected of them to do so, unless, by the liberality and justice of the legislature, they are placed upon a footing of equality with the adjoining States. Common sense, self interest, and that desire so natural to man, of bettering his condition, will control them in their election. And *prudence, state pride, and an enlightened policy*, will, we are sure, rule the ascendant in the legislative councils of the state. Should these prevail, and our belief is that they will, we shall not fear for the result.

But while the legislature are engaged in concocting their bounty law, we beg leave to suggest, that it would be as unwise as impolitic, to follow the example of Delaware, in excluding *Companies* from its benefits; such exclusion, besides favoring the aristocratic doctrine of privileged orders, will tend more than any thing else to arrest the growth of the Silk business. Company operations are equally as important as individual exertions, and for the following reasons:

1. By the creation of companies, *home markets* will be provided for the sale of cocoons and raw silk, and thus enable the *small farmer* to dispose of his commodities. To our personal knowledge, the want of such markets for small lots of cocoons have hitherto prevented many industrious poor persons from feeding worms.—We have received numerous letters, making enquiries where sales of a few bushels of cocoons could be effected.

2. *Individuals*, in the very nature of things, never can, or will establish, the silk business upon a scale sufficiently large to afford those markets, so much desired by the industrious small

farmers; therefore, it should be the object of the State to encourage companies to establish themselves amongst us; for as we have said in another place, Maryland cannot spare either her citizens or their money, and it should be her policy, as it is her interest, not only to keep what she has of both, but, by a liberal and enlightened course of conduct, to attract capitalists hither, and thus augment her physical and moneyed power.

In conclusion we will remark, that great and weighty responsibilities rest with the present legislature of this State, and that upon the wisdom or folly of their determinations much of good or evil will arise to Maryland.

We insert in to-day's paper a memorial from the Executive Committee of the *American Silk Society*, to the speaker of the House of Delegates of this State, and sincerely hope its several prayers may find favor with that body, as we hold it they are based on the soundest principles of justice and policy.

To the Speaker of the House of Delegates of Maryland.

Through you, Sir, as its presiding officer, is herewith respectfully presented to the House of Delegates, the first number of the "*Journal of the American Silk Society.*"

It is respectfully submitted, whether the Legislature would not contribute, at a very small expense, to the diffusion of much useful, as well as the most authentic information among the people, on a new and promising branch of industry, either by ordering the printing of this number, or by causing subscription to be made for a few copies of the work to be placed in the public libraries, and such other Institutions in the several Counties, of easy access to the public—such as the Orphans' and Levy Courts, as in its wisdom it may designate. It is hoped that it may not be deemed impertinent or superfluous, to embrace the occasion to urge, most respectfully, on the appointed guardians of the agricultural interests of the State, the good effects that would not fail to result from the offer of a *bounty*, for a limited time, on the production of *cocoons and silk reeled from cocoons*, raised within the State of Maryland.

If the policy of such a measure were not obviously wise in itself, it is rendered almost imperative by the bounty which has been recently offered, not only by other States, but by Pennsylvania and Delaware—two sister States, bordering on thirteen counties of Maryland. On the general question, whether our *country* possesses the soil, climate, labour and other facilities adapted to and necessary for the production, with profit, of the 25,000,000 of dollars worth of silk which we now import, all doubt is rapidly giving way before inquiry and experiment.

The introduction of a new tree, bearing food for the worm, in the first year of its life, with power in its every joint to radicate and grow, cultivated by a simple process with which all are familiar, requiring land of but ordinary fertility; would, all other things the same, ensure the suc-

cess of the silk culture in an arid and congenial climate such as ours.—When to this we add the persevering ingenuity of our people in improving all labour-saving machinery, there can be no fear of our country becoming speedily independent of foreign supply. But this great prize of industry must first be won by the more favoured citizens of those States, whose Legislatures are foremost in holding out the hand of support and encouragement. Should, unfortunately, the capital and enterprize of our own State, be once drawn into others, by the force of superior advantages held out for their employment, it may be difficult, if not impossible, to overtake those who will have gotten so far, the start of us in their experience, their establishments, and their knowledge of the market.

Moreover, when your honourable body considers that the labour and the earnings in this business may be confined in a great measure to persons such as women and children whose feeble hands are now unproductive and helpless, it may be hoped that you will extend a helping hand to this dawning interest of your constituents, until experience shall have enabled it, as it very soon will, to stand alone and take care of itself.

Leave is respectfully asked, to present one further suggestion.—It is confidently believed, that of all employments, the culture of silk would be the most suitable and profitable for the tenants of the *Alms Houses*, in the several counties, and that after a few years, when the bounty might be withdrawn, these establishments which are now burdens on the counties, would sustain themselves, and afford besides the means for their inmates of that greatest of all blessings, *useful instruction*, thus turning these sores on the body politic into hives of industry and knowledge, from which might be procured persons competent to teach, in families and villages, the *whole art and process of silk making*. Offer but for a short period the same bounty which is held out by adjoining States, and you offer bread to the widow and the fatherless, and to the poor man, whose helpless children you will convert from burdens into blessings. To what honourable mind would not their benedictions be more grateful than the loud and ephemeral huzzas of party triumph.

J. S. SKINNER, } Of the Executive Com-
L. J. COX, } mittee of the American
G. B. SMITH, } Silk Society.

MEMORIAL TO THE LEGISLATURE.

We insert in another column to day, the memorial of *Vespucci*, in behalf of the Silk culture, and although it bears but one signature, and that anonymous, we are sure we speak the truth when we say, that it embodies the sentiments of sevenths of the intelligent men of Maryland; nor do we err when we declare, that it points to the true policy of the state with as unerring a direction as does the needle to the pole. We deem it hardly necessary to speak of its style, as its racy, bold and patriotic tone, will commend it to every reader of taste; but although we have no authority for the conjecture, and have never heard a word uttered with regard to its authorship, yet we will

venture the assertion, that, if the *Vespucci* known to historians as the discoverer of the Continent of America, is entitled to the thanks of every friend of man for the benefits which have flowed from that discovery, that the individual, who with so much classic propriety has used his name in this memorial, has by his labors in behalf of the greatest of all human interests, established claims to the gratitude of his countrymen which should be as lasting as the Alleghanies.

To the Legislature of Maryland.—The memorial of the undersigned, approaching you in behalf of many widows with helpless children, of orphans, of poor men with large families and little or no capital, and of all who would support themselves by any honest labor adapted to their physical powers, respectfully solicits your honorable body to offer for a few years a bounty on *cocoons*, and on *silk to be reeled from cocoons raised in the State of Maryland*. Our little sister Delaware, with a forecast that will cause her neighbours, some years hence to say

"That still the wonder grew

"That one small head should carry all she knew," has taken the lead of us—offering a bounty which if not so intended, cannot fail of having the effect to attract our capital and enterprize within her borders.—She offers fifteen cents a pound for cocoons and fifty cents a pound for silk reared in that State—the law to expire at the end of four years; and Pennsylvania gives twenty cents for cocoons and fifty cents a pound for silk. Now, Delegates of Maryland, with such a premium against him in these two bordering States, how can one of your constituents enter in the lists in this new branch of Industry?

Some there are who fear, but your petitioners are not of that number, that some member may be prevented from giving legislative countenance to this important concern, from the apprehension that their constituents might regard it as showing favour to an *aristocratic interest*. Were it possible that any of you could so far sink the Patriot in the demagogue, as to prefer his own popularity to the public good, yet even this passion, so low when unenlightened, may happily in this case, be made to square with the objects and the wants of your petitioners; for, who, let us ask, are they, who are to be employed, clothed and fed, by the profits of the labor required in this business; beginning with the cutting up of the branches into buds for planting, even to the turning off of the fabric in its finished state? We answer almost exclusively, women, boys, and girls, the lame, the aged and infirm. Thus saving the young and the helpless from idleness, you save them from mischief and from ruin, for as the old proverb truly saith, "Idleness is the nest, in which mischief lays her eggs." And, after all, when, by the heretofore unprofitable hands of women and children, with some adult superintendence, we shall have created, as it were out of nothing, a *new property* in our own country, to the amount of nearly thirty millions of dollars, is it any sound objection, that the surplus wealth of the opulent part of society, which will be expended in that article, "any how," should go to reward the labor of, and give comfort to our *own people*, rather than to

foreigners? Let then even the calculating partizan, if there could be such in your body, always looking over his shoulder to see how the measures in hand will be received in "Bunkum," dismiss all fear on the score of *popularity*! a fragrant and beautiful flower by the bye, when rising spontaneously *behind*, the Patriot, but when springing by artificial heat, from the hot bed of selfishness, is short lived, hideous, and disgusting to every sense—fit only to be cast

"Like a loathsome weed away!"

Again, your petitioners would suggest that luxury itself, far from being indiscriminately to be deprecated, may be innocent and even salutary, where wealth is in great accumulation, and where indulgence is unassociated with vice; but the free use of *silk goods* is neither luxurious, extravagant, nor aristocratic. Look at the pretty Quaker lady, passing up on the sunny side of the street, with her nice shoe and silk stocking, and snow white cap and silk bonnet, and rich silk gown; changeable as the hues reflected by the gorgeous plumage of a wild turkey cock! where will you find a more economical house-wife than she? all in order, "neat as a band-box" from the garret to the cellar. Is there any cause of regret that her wardrobe, redolent of lavender and roses, is hung around with silk dresses? yes there is one, and that is that they are not the product of *American labor*!!

The friends of *American silk culture* have not gone to Congress to ask a bounty, because were there no other objections or difficulties, amid the fierce and eternal scuffle for party ascendancy, drowning the cries for justice from scores of honest claimants at the gates of the capitol, it is not likely that any new interest could make itself heard. No! it is to *you gentlemen*, appointed guardians of the welfare of *old Maryland*, that we appeal! To you, successors of Stone and of Paca—of Howard and of Carroll, with Tilghman and Lafayette and Washington overlooking your proceedings. Bear in mind, we beseech you, that though it were possible we should plead in vain for those who have honored you with seats in halls, thus consecrated by the eloquence and the speaking portraits of revolutionary patriots; still, in spite of your neglect, nothing can arrest the onward growth of this great interest in *other states*, where it has been wisely fostered by legislation. With some public nurture in its infancy; with a new silk bearing tree, that like the Polypos carries the power of a separate existence in its body, and the genius of a GAY to invent improvements in labour saving machinery, the success of the silk business in *America*, is already, put *beyond question*. All we say to you gentlemen is, there hangs a large and bountiful purse, labelled, NATIONAL INDEPENDENCE—AMERICAN SILK—\$25,000,000!! to be divided most to the winner, and so in proportion as they all come on in the race—six and twenty nags are coming to the post; you are the trainers of old Maryland,—will you not take care that she gets a *fair start*? She has been a winner, and the mother of winners, in many a glorious field. Let her have an *equal chance*, and we will answer for it, she'll be there—or thereabouts.

VESPUCCI.

Agriculture is the most innocent of all employments of man.

GREAT MEETING IN PHILADELPHIA.

We transfer to our columns to-day, the following notices of the great meeting held by the friends of the Silk culture in the city of Philadelphia, on Monday, the 28th ult. with no ordinary feelings of pleasure. In the large and respectable character of the meeting—in the warmth and zeal manifested by those who actively participated in its proceedings—in the deep and profound interest felt by those in attendance—and in the wisdom and far-sightedness of the proceedings themselves, we behold the sure presages that the glorious work has attracted to its aid the right men to carry it onward in triumph.

From the Commercial Herald and Pennsylvania Sentinel.

SILK BUSINESS—LARGE MEETING.

There must have been great delight to all the friends of the extension of the Silk Culture in America, to witness the great saloon of the Franklin Institute, on Monday evening, filled to overflowing by the most intelligent portion of our citizens, and many from neighboring towns, and some from distant states.

The meeting was organized by calling the venerable *Matthew Carey* to the chair, and the choice of *Dr. Tucker* for Secretary.

Dr. Physic then presented a most admirable letter from *Mr. Roberts*, of Baltimore, which may be termed an essay in favor of the Silk Culture in our country. This was followed by a set of resolutions, by the same gentleman, which were considered separately, and elicited some elegant and excellent speeches.*

Dr. Emerson first addressed the meeting, the main feature of his remarks going to show that our country was superior to Europe, and especially to France, for the cultivation of the Mulberry tree.

This was shown in several ways; first, in consequence of the sudden frosts in Europe, which often destroyed the tree, before it had obtained sufficient root. Second, in consequence of the great humidity of the climate, especially in England, which prevents the silk worm from a healthy growth. Third, the exposed condition of most of Europe to adverse winds, which have proved especially injurious to the growth and permanence of the *Morus Multicaulis* tree.

Mr. Kinsman of the city, followed; and made a most excellent speech. It was calculated to shew the adaptation of the silk culture to the wants of large classes of our people; and its importance ultimately as affording us an article of export that would quite equal the value of cotton, and contribute to turn the balance of specie in our favor. It showed the merchant, shrewd and calculating throughout, based upon facts and data that cannot be disputed.

A gentleman then addressed the meeting, whose name we could not hear, in a very fervid manner, showing that, until our country commenced attention to the silk culture, the price of raw silk from abroad was much on the advance; and concluding that America was surely destined to add this branch to her permanent industry, to form one more guard to that happiness and freedom she now so eminently enjoys.

Mr. Nathan Sargent presented a few brief, but very pertinent remarks, showing that the silk culture was precisely that branch of occupation, which was required in our farmhouses to fill up the place formerly occupied by the distaff and the loom. This gentleman very aptly remarked, it had been well said, "That he who caused *two* spires of grass to grow where only *one* grew before, was a philanthropist: but how infinitely would its spirit of benevolence be extended, to give a species of employment to the indigent classes, by which they could always realize an independent return of their honest toil."

Mr. E. Holden was called up, by some of the friends who surrounded him, and occupied the marked attention of the auditory in a speech of practical demonstration. The chief point of his remarks, was to show the fallacy of the position, assumed by the unthinking and uninvestigating, that the United States can never become a silk growing country, in consequence of labour being here so much higher than it is in China, France and Italy. This was precisely, said *Mr. H.*, the doctrine advanced in the infancy of American manufactures. It was said, we could never compete with the skill and industry of Manchester and Birmingham, because there labourers could be had for less than 50 cents per day, and here we pay more than twice that amount. While that doctrine was dinning in our ear, *Lowell, Patterson*, and a thousand cities of manufactures, had sprung into existence; and now, instead of consuming the flimsy cambrics of the old world, we export to Calcutta cotton fabrics, produced by machinery invented by American machinists "that does every thing but talk." We have outstripped other nations in our inventive mechanical powers. *Fulton* has flooded the rivers and the seas with steamboats and steam-ships. *Whitney* saves about twelve-sixteenths of operative labour by his Cotton Gin ("a wonderful piece of mechanism, remarked *Mr. Sargent*, that has never found its way to China.") It will be so in the silk business, continued *Mr. Holden*.—While the skill of one American, has invented a machine that takes in a bit of wire on one side and a piece of leather on the other, turning out a perfect card—some other ingenious American will soon invent a machine that will take in a thread of silk on one side, and throw out a perfect lady's dress for our beautiful belles to promenade Chesnut street in!—We shall do, by machinery, in the silk business, what older countries half do by their unskilful manual labour. We shall have machinery that will do as much in a day as twenty of their laborers can do in a week. We are well near that now, by *Gay's & Dennis's* Silk Machinery.

Besides, continued *Mr. H.*, the silk culture is calculated to render the dependent portion of every farmer's family in the country, perfectly independent, as it will employ the aged, the women and the children, whose labour is now almost unproductive. In a national point of view, then, the silk culture is one that should command the favour of every friend of his country. It is that branch of industry which must make happy, contented and independent, a large portion of American society, and demands, therefore, the warm encouragement of every patriot and friend of our free institutions.

Mr. Holden was followed in a very enthusiastic

speech by *Dr. Sutherland*, to sketch which we have no room to-day; and also that of another gentleman, who followed the Doctor, whose name we did not learn. Both of whom were received with great enthusiasm.

*The following are the resolutions introduced by *Doctor Physick*, which were unanimously adopted. We copy them from *Poulson's Daily Advertiser*.

Resolved, That this meeting concur in the resolution passed by the National Convention of Silk growers, held at Baltimore in December last, "that Silk may be grown in all the United States, not only for domestic purposes, but as a valuable article of commercial export."

Resolved, That in the opinion of this meeting, experience has demonstrated that the soil and climate of Pennsylvania are better adapted to raising Silk than those of Italy or France.

Resolved, That practical information upon the Culture of Silk, spread among the citizens of our State, is calculated to promote the interests of every class of society.

Resolved, That no project has been started of late years in the United States, so well calculated to ameliorate the condition of the industrious poor, as the culture of Silk.

Resolved, That it is expedient to hold a State Convention in Harrisburg, on the 22d of February next, to form a State Society, to consider of and recommend such measures as in their judgment will best encourage the growth of Silk in every county in the State, and also to aid the National Silk Society in procuring and diffusing important information throughout the United States.

Resolved, That the friends of Silk culture in every part of the State are invited to attend the Convention as members thereof.

Resolved, That the members of this Convention are requested to devise some plan, whereby philanthropists may establish Mulberry Orchards in the vicinity of our large cities and villages, for the purpose of supplying Mulberry leaves gratuitously to the worthy indigent inhabitants thereof.

Resolved, That Editors and Publishers throughout the State will confer a public benefit by inserting in their journals the proceedings of this meeting.

An interesting debate was held upon these resolutions, which elicited much eloquence and ability, Messrs. *Israel Kinsman, Holden, Sargent, Comfort, W. B. Whitecar, Dr. Mease, Dr. Emerson, the Hon. J. B. Sutherland* and others addressed the meeting.

The following resolutions were subsequently adopted.

Resolved, That the Silk Journal established by the Convention, held in Baltimore in December last, and edited by *J. S. Skinner, Esq.* be and it is hereby recommended to the patronage of this meeting, and the American public generally.

Resolved, That Delegates in attendance at the Convention to be held at Harrisburg on the 22d of next month, be requested to procure the passage of a law to protect the Mulberry Tree.

Resolved, That a Committee consisting of *Dr. Mease, Dr. S. Tucker*, Messrs. *Kinsman, Comfort and Cleveland* be directed to appoint 30 or more delegates from the city and county of Philadelphia, to attend the Convention to be held at Harrisburg, the 22d of February.

Resolved, That the proceedings of this meeting be published in all the daily papers of this city.

MATHEW CAREY, Chairman.

S. TUCKER, Secretary.

We take pleasure in copying the following resolutions passed by the recent Convention held at Annapolis for the purpose of forming a "State Silk Society," in which deserved compliments are bestowed upon two meritorious citizens of Baltimore:—*Patriot*.

Resolved, That the thanks of this convention are due, and they are hereby tendered to GIDEON B. SMITH, Esq. of Baltimore, for his early and eminently valuable services, in introducing, rearing the Multicaulis, and for calling the attention of the American people to the propagation of that plant for feeding silk worms, and the cause of silk culture generally.

Resolved, That EDWARD P. ROBERTS, Esq. of Maryland, deserves well of the country for his early and efficient exertions in aid of the silk culture, through the columns of the "Farmer and Gardener," and his valuable "Silk Manual."

We are truly gratified to find the return of Mr. Skinner, to his editorial labours so heartily greeted by his old friends of the corps; for most richly does he deserve a heart-welcome from all, as though there may be older soldiers in the field we are sure there are none abler.—*Edt. Farmer and Gardener*.

Mr. Skinner of Baltimore, so long known as the Editor of the American Farmer, and more recently of the Turf Register, has undertaken the management of a new Journal designed to foster the cultivation of the Mulberry, and the rearing of the Silk Worm. We wish him success.—*Norfolk Beacon*.

And so do we, heartily! If ever there was a man cut out for such a periodical, by talent, taste, and above all by enthusiasm, it is John S. Skinner. *Agriculture* and the *Turf* are already under deep obligation to him.—We hope this new and beautiful production, may we not add, one of the future staples of our country? will be equally indebted to his exertions. He publishes his new Journal under the auspices of the late Silk Convention of Baltimore. We shall publish his prospectus in a day or two. Nothing but the most urgent engagement could have hitherto prevented it.—*Richmond Enquirer*.

Journal of the American Silk Society and Rural Economist.—In accordance with the expressed wish and recommendation of the National Silk Convention which met in Baltimore, in December last, a monthly periodical has been established in this city, under the foregoing title. The first number being for the month of January, presents a full detail of the proceedings of the above Convention—a meeting which, considering all its direct and indirect results, is likely to exert a very salutary influence upon that (to be) great department of human enterprise and labour, in the United States, the growth and manufacture of SILK. Not exactly the least important of these results, is the prompt appearance of the "Journal of the American Silk Society," to which we refer, and the first number of which is now before

us. It is a handsomely printed pamphlet of forty pages, and purports to be under the chief editorial direction of J. S. SKINNER, Esq. a gentleman who is known, far and wide to be especially well qualified to stand at the helm, in all such important pioneer enterprises.

There is good reason to believe, moreover, that the editorial exertions of Mr. Skinner, in this respect, will be well seconded by other gentlemen of ability and experience, who are convinced, like him, of the growing importance of the Silk Culture, as a means of employment, and for amassing wealth, in this land of thrift and enterprise, and who are therefore, as he is, anxious for the publication of a work, which shall have real titles, on the score of practical usefulness, to the notice of the Silk growing interest, and of all who would favor that interest, throughout the country. In point of fact, we have not the least doubt that the periodical thus commenced, will approve itself of high merit, and be truly worthy of wide circulation. As an evident and necessary means of securing early as well as ultimate success of a great and important branch of national industry—which the SILK CULTURE will surely come to be, in these United States—we cordially wish for this work, extended patronage, and for the undertaking a full measure of success. If the "Journal of the American Silk Society" should not secure a thorough circulation in every Silk growing region of the country, the evil and the loss, we undertake to say, would be with those who were deprived of the aids, in their pursuit, to be drawn from its instructive pages.—*Patriot*.

BRITISH GARDEN SEEDS, &c. &c.

ROBERT SINCLAIR, JR. & CO.

ARE JUST OPENING a superior lot of GARDEN and European FIELD SEEDS, received by the several late arrivals from Europe and from their Seed Gardens near this city. The principal Seeds received and for sale, are viz:—

1100 pounds EARLY CABBAGE Seeds consisting principally of Early York, Bullock's-heart, Emperor and Flat Battersea.

600 pounds LATE CABBAGE SEEDS—the Flat Dutch, Drum head and Globe Savoy are included in this lot, raised under our inspection and are particularly fine.

700 pounds London Scarlet short top RADISH, early, round, long White, Yellow Turnip and Spanish RADISH SEED.

8 casks BEET SEED, of several Dark Red Garden sorts. Yellow and White Sugar and Mangelwurzel Beet Seed.

800 pounds Rutabaga, Hybrid and other TURNIP SEED.

16 casks early and marrowfat PEAS, in prime order.

Also, London Cauliflower and Brocoli Seed, Cross and Cabbage Lettuce, Tomato, Squash, Scotch Kale, Parsnip Seed, Carrot several kinds, Melons, Cucumber, Spinach, Early Corn, bunch and pole Beans, English Windsor Beans, &c.

23 casks English and Italian Ray Grass, Scotch field Peas and Beans, Potato Oats weighing 44 lbs per bushel. Spring Vetches, White Clover, Lucern English Lawn Grass, early round and kidney Potatoes.

In store.—Italian Spring Wheat, Spring Barley, Kentucky Blue Grass, Baden and Twin Corn, Orchard, Herds and Meadow Oat Grass Seed, Common Red Sapling Cloverseed, and every other variety American field Seed.

For sale as usual.—AGRICULTURAL IMPLEMENTS and TOOLS of every description, BOOKS on Cultivation and management of stocks.

Orders for TREES and PLANTS, supplied at the shortest notice. feb 12 w4w

CLAIRMOUNT NURSERY, NEAR BALTIMORE.

The subscriber offers for sale a general assortment of grafted FRUIT TREES, as usual—amongst them are 20,000 thrifty Peach Trees, of good size for transplanting, of the most choice varieties; Catawba, Isabella and other choice Grape Plants, two and three years old, at reduced prices by the hundred; English Gooseberry, Currant, Raspberry and Strawberry Plants. Also, many thousands of Ornamental Trees, suitable for planting in streets and lawns, 15 feet high, of the following sorts—Chinese Alanthus, or Tree of Heaven; Silver leaf and Tulip Poplar; Silverleaf Sugar, red flowering and Ashleaved Maple; English, Dutch and Scotch Elm, European and American Linden; Common and Pinkflowering Locust; Catalpa; Paper Mulberry, and the much admired European Larch; White and Red Flowering Horse Chestnut; English and other Walnut, Macclusa or Osage Orange—the four latter named trees are of smaller size. Several thousand Evergreen Trees of the following kinds—Balsam Fir, Arborvitae, American and from India; Weymouth Pine; American or Black Spruce; dwarf and tree Box; Roses and other Ornamental Shrubs, Vines and Creepers, large Plants; giant Asparagus; Hop and Horse Radish Roots.

Form any other articles and further particulars, see printed and priced Catalogues, which will be sent by mail gratis to persons requesting them.

MORUS MULTICAULIS MULBERRY.

The subscriber has for sale, a few thousand TREES and CUTTINGS of his own raising, at regular prices; having raised this tree for seven years, and having the advantage of much experience in raising this valuable tree, purchasers may rely on getting a genuine article in a perfect state of preservation.

Also, 10,000 MORUS ALBA, or Italian White Mulberry Trees, 2 to 6 feet high, at \$2 to \$10 per hundred, and less per thousand.

Orders sent by mail or otherwise will be promptly and carefully executed, and forwarded to any part of the U. S. when more convenient. Orders may also be left with R. Sinclair & Co., Light street, Baltimore.

feb 8 law4t ROBT. SINCLAIR

SEEDS, PLANTS, FLOWERS.



The subscriber offers for sale at his establishment a fresh supply of GARDEN SEEDS of the very best quality; those that cannot be grown in this country he imports direct from Europe from a source that can be relied on.

Besides a large collection of GREENHOUSE, hardy ORNA-

MENTAL TREES and Shrubs, Herbaceous Plants, and Bulbous Roots, and a choice collection of the very finest double Dahlias offered for sale, all on reasonable terms, wholesale or retail.

Also on hand a few bushels of ITALIAN RYE GRASS, with 100 bush. ITALIAN SPRING WHEAT, of the true kind. All orders for Fruit and Ornamental Trees, or any thing appertaining to his establishment will be strictly attended to, by

JOHN FEAST, Florist & Seedsman, cor. of Lexington and Pine sts. ja 22 tf Baltimore.

SPLENDID BLOODED STOCK FOR SALE.

The proprietor of Covington farm will dispose of the following fine bulls on reasonable terms, viz.

One bull two and a half years old.

One do. six months old.

of the improved Durham short horn breed; the dam of the first was got by the celebrated bull Bolivar; for size, form and beauty they are not surpassed by any animal in the state.

Three Devon Bulls, one of which is seven years old next spring, and the largest Devon in the State. The Devons are from the stock of the late Wm. Patterson, and of undoubted purity.

Two half Devon bulls.

Two bulls half improved Durham short horn, and half Devon.

One splendid bull, a cross of the Bakewell, Alderney and Devon.

One bull, half Alderney and half Holstein.

These fine animals may be seen at Covington farm, near Petersville, Frederick county, Md. on application to James L. Hawkins, Baltimore, or to

se 11 f FREDERICK EBERT, Manager.

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every MONDAY

	PER	FROM	TO
BEANS, white field,	bushel.	2 50	
CATTLE, on the hoof,	100lbs	9 50	11 00
CORN, yellow	bushel	86	87
White	"	86	87
COTTON, Virginia,	pound	15	15 1/2
North Carolina,	"	13 1/2	14 1/2
Upland,	"	14 1/2	15
Louisiana — Alabama	"	15	16
FEATHERS,	pound.	55	
FLAXSEED,	bushel.	1 69	1 75
FLOUR & MEAL—Best wh. wh'tfam.	barrel.	10 00	10 50
Do. do. baker's	"		
SuperHow. st. from stores	"	8 37	
" wagon price,	"	7 87	
City Mills, super	"		8 50
extra	"	8 62	8 75
Susquehanna,	"		
Rye,	"	5 50	
Kila-dried Meal, in hhd.	hhd.	19 00	
do. in bbls.	bbl.	4 00	
GRASS SEEDS, wholes. red Clover,	bushel.	14 00	15 00
Kentucky blue	"		
Timothy (herds of the north)	"	2 00	2 50
Orchard,	"		3 00
Tall meadow Oat,	"		90 1 00
Herds, or red top,	"		
HAY, in bulk,	ton.	12 00	16 00
HEMP, country, dew rotted,	pound.	6	7
" water rotted,	"	7	
Hogs, on the hoof,	100lb.	9 00	
Slaughtered,	"	7 75	8 50
Hops—first sort,	pound.	20	
second,	"	18	
refuse,	"		
LIME,	bushel.	32	33
MUSTARD SEED, Domestic, —; blk.	"	3 50	4 00
OATS,	"	48	50
PEAS, red eye,	bushel.		1 12
Black eye,	"	1 00	1 12
Lady,	"		
PLASTER PARIS, in the stone, cargo,	ton.	4 25	
Ground,	barrel.	1 50	
PALMA CHRISTA BEAN,	bushel.		
RAGS,	pound.	3	4
RYE,	bushel.	100	103
Susquehanna,	"		none
TOBACCO, crop, common,	100lbs	5 00	5 50
" brown and red,	"	6 00	6 50
" fine red,	"	9 00	12 00
" wrappery, suitable	"		
for segars,	"	10 00	20 00
" yellow and red,	"	10 00	14 00
" good yellow,	"	10 00	15 00
" fine yellow,	"	12 00	15 00
Seconds, as in quality,	"	6 00	
ground leaf,	"	7 00	9 00
Virginia,	"	6 00	10 00
Rappahannock,	"		
Kentucky,	"	6 00	8 00
WHEAT, white,	bushel.		
Red, best	"	1 80	
Maryland	"	1 60	1 75
WHISKY, 1st pf. in bbls.	gallon.	44	45
" in hhd.	"	41	
" wagon price,	"	bbls	41
WAGON FREIGHTS, to Pittsburgh,	100lbs	2 00	
To Wheeling,	"	2 25	
WOOL, Prime & Saxon Fleeces,	pound.	50 to 55	
Full Merino,	"	45 50	
Three fourths Merino,	"	40 45	
One half do.	"	35 40	
Common & one fourth Meri.	"	35 40	
Pulled,	"	30 33	
POTATOES, 60 to 70 cts. a bushel.			

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,	barrel.		
BACON, hams, new, Balt. cured	pound.	15	
Shoulders,	"	12 1/2	13
Middlings,	"	12 1/2	
Assorted, country,	"	10 1/2	11
BUTTER, printed, in lbs. & half lbs.	"	31	50
Roll,	"	25	31 1/2
CIDER,	barrel.	1 75	2 00
CALVES, three to six weeks old	each.	5 00	6 00
Cows, new milch,	"	25 00	40 00
Dry,	"	12 00	15 00
CORN MEAL, for family use,	100lbs.	2 00	2 12
CHOP RYE,	"		1 60
EGGS,	dozen.	37 1/2	
FISH, Shad, No. 1, Susquehanna,	batrel.		
No. 2,	"		
Herrings, salted, No. 1,	"	6 00	6 25
Mackerel, No. 1, ———— No. 2	"	11 50	13 50
No. 3,	"	7 50	
Cod, salted,	cwt.	3 25	3 37 1/2
LARD,	pound.	12	13 1/2

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

U. S. Bank,	par	VIRGINIA.	
Branch at Baltimore,	do	Farmers Bank of Virgi.	par
Other Branches,	do	Bank of Virginia,	do
MARYLAND.		Branch at Fredericksburg,	do
Banks in Baltimore,	par	Petersburg,	do
Hagerstown,	o	Norfolk,	do
Frederick,	do	Winchester,	do
Westminster,	do	Lynchburg,	do
Farmers' Bank of Mary'd,	do	Danville,	do
Do. payable at Easton,	do	Bank of Valley, Winch.	par
Salisbury, 1 per ct. dis.	do	Branch at Romney,	par
Cumberland,	par	Do. Charlestown,	par
Millington,	do	Do. Leesburg,	par
DISTRICT.		Wheeling Banks,	2 1/2
Washington,		Ohio Banks, generally	3
Georgetown,	Banks, 1/2 p.c.	New Jersey Banks gen.	3
Alexandria,		New York City,	par
PENNSYLVANIA.		New York State,	do a 1/2
Philadelphia,	par	Massachusetts,	1 1/2 a 1/2
Chambersburg,	1/2	Connecticut,	1 1/2 a 1/2
Gettysburg,	do	New Hampshire,	1 1/2 a 1/2
Pittsburg,	2 1/2	Maine,	1 1/2 a 1/2
York,	1/2	Rhode Island,	1 1/2 a 1/2
Other Pennsylvania Bks.	2	North Carolina,	3 a 1/2
Delaware [under \$5],	4	South Carolina,	4 a 5
Do. [over 5],	1 1/2	Georgia,	5 a 1/2
Michigan Banks,	10	New Orleans,	7 a 8
Canadian do.	10		

FOR SALE,

A valuable FARM of prime soil, on the Western Run in Baltimore county, about two miles north west of the 14th mile stone of the Baltimore and York turnpike road, and at the same distance from the depot of the Baltimore and Susquehanna rail road, at Cockey's tavern, in a rich, highly cultivated and healthy tract of country.

This farm contains from 260 to 270 acres, having a full proportion in wood, much of which is building timber, peculiarly valuable in that neighborhood; is in the best state of cultivation; a considerable part in productive timothy meadow, and the residue of the arable land, not in grain, is well set in clover, the whole under good fencing, laid off into convenient fields, each of which is well watered. The farm has a large quarry of excellent building stone. There are on the premises an apple orchard of select fruit trees, which seldom fail to bear abundantly; a valuable mill seat on the Western Run, with a race already dug. There is no location in the country more favorable for a grist mill, having the advantage of a rich and thickly settled neighborhood, and a good public road leading thence to the turnpike road. Buildings substantial and convenient, being a STONE DWELLING, and kitchen of two stories; a large stone Switzer barn, with cedar roof and extensive stabling below; large hay house and stable for cattle; stone milk house near the dwelling, with a spring of fine never failing water, with other out-houses. On the country road near the mill-seat a good house and shop for a mechanic, under rent to a good tenant. It is well known the lands on the Western

Run are in every respect equal, if not superior to any in the county. Adjoining or near are the lands of Col. N. Bosley, Daniel Bosley, Thos. Matthews and others. The water power, with about 20 acres of land, is so situated that they may be detached and sold separately, without injury to the rest of the farm for agricultural purposes. Terms of sale will be liberal. Apply to

NATHANIEL CHILDS,

on the premises, or to

WILLIAM J. WARD,

oc 23 tf Fayette, near Calvert st. Baltimore.

FARM FOR SALE.

The subscriber has for sale a beautiful little Farm consisting of about 80 acres of land, in a high state of cultivation, having been occupied for several years as a dairy and market garden; it bounds on the eastern line of the city for nearly half a mile, and about the same distance on the Philadelphia turnpike. The improvements consist of a substantial two story dwelling house with two wings, barn, stable, poultry, spring and milk houses, and outbuildings. There is near the house a spring of excellent water, which empties into an ice pond.

The access to this property is by the Philadelphia turnpike, which is confessedly one of the best roads in the union, and from its contiguity to this city, being only 2 miles from the centre thereof, is a most desirable property. For terms apply to E. P. ROBERTS, Baltimore, Md. ja 29 3t

FRESH SUPPLY OF FIELD AND GARDEN SEEDS,

BY THOMAS DENNY, Ellicott near Pratt street, Baltimore, who has just received general supply of GARDEN SEEDS, the growth of 1838, part of which was raised by the first Seedsm-n of this country, and a part imported, all of which will be sold wholesale and retail, upon the best terms, such as

GARDEN PEAS; Early and Late assorted Cabbage; Cauliflowers; Radish; Lettuce; Cucumber; Parsnip; Carrot; Onion; Rutabaga Turnip; Parsnip seed of all kinds, Garden Beets assorted; French Sugar Beet; Mangel Wurtzell, &c. &c. Also Field SEEDS, such as Early Sugar, Early White, Sioux, Chin or Tree Corn; Dutton, Baden and Twin Corn; Red Clover; Luzerne and White Dutch Clover; Timothy; Orchard; Herds; Millet, Tall Meadow Oats; superior Weed Oats; Spring Wheat; Spring Rye; Spring Barley; Seed Buckwheat; blue and Kentucky Lawn Grass, &c. &c.

Also GARDEN TOOLS, assorted sizes, and late improved patterns; Bird Seed of all kinds, Double Dahlias; Hyacinths, and Polyanthus, assorted, and selected for beauty and richness of colours, together with choice Flower Seed, assorted; Mulberry Trees; Fruit and Ornamental Trees; Silk worm Eggs; &c.; Agricultural Books; Silk Manuals; &c. Rohan Potatoes—Early Seedling do. &c. All orders by mail or otherwise will meet with early attention and dispatch, on the best terms for cash. ja29 8t

SILK AGENCY,

Corner of E. and 7th streets, Washington City, D. C.

The subscriber having commenced an Agency for the purchase and sale of SILK MULBERRY TREES, and all articles connected with the growing of Silk, offers for sale the following varieties of Mulberry Trees at Baltimore prices, viz. Multicaulis, Alpine, Broussa, White Italian and Canton; also Mammoth White Silk Worm's Eggs, warranted to be of superior quality. All the recent publications on silk growing for sale, and subscriptions received for the various periodicals devoted to that subject. no 20 J. F. CALLAN.

CHINESE MULBERRY TREES.

American Silk Agency, No. 95, Walnut st. Philadelphia The subscriber having opened a permanent Agency for the purchase and sale of all articles connected with the culture and manufacture of Silk in the United States, offers for sale all the different varieties of MULBERRY TREES, suitable for raising the SILK WORM; viz. Morus Multicaulis Alpines, Brussa Multicaulis Seedlings, Morus Expansa, Multicaulis Cuttings, Improved Italian Trees, &c. Also, Cuttings from Norton's Virginia Seedlings, and Cunningham's Prince Edward GRAPE VINES. These vines produce an abundant crop of fruit, warranted not to rot or mildew and are fine for the table, and capable of yielding the finest wines.

S. C. CLEVELAND, Agent.

THE AMERICAN FARMER.

The proprietors of this paper have a few complete sets of this work on hand, which they will dispose of at the reduced price of \$50 a set. oct. 16 3

THE FARMER & GARDENER

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, E. P. ROBERTS AND SAMUEL SANDS—EDITED BY E. P. ROBERTS.

No. 43.

BALTIMORE, MD. FEB. 19, 1839.

Vol. V.

— THIS publication is the successor of the late
AMERICAN FARMER
and is published at the office, at the N. W. corner of
Baltimore and North streets, over the Patriot office, at two
DOLLARS AND FIFTY CENTS per annum, if paid within one
month from the time of subscribing, or \$3 if after that
time. All letters to be postpaid.

BALTIMORE: TUESDAY, FEB. 19, 1839.

THE SILK CULTURE—POLICY OF BOUNTIES.

The following is a copy of a letter addressed
by the editor of this journal to a member of the
House of Delegates of Maryland, in reply to one
addressed to him, asking information. It is given
to the public in the hope that it may contain
something which may advance the interests of
the silk culture.

BALTIMORE, Feb. 11, 1839.

Dear Sir—Your esteemed favor of the 5th
inst. came to hand by due course of mail, and
would have been earlier answered, but that my
avocations have hitherto prevented me from devot-
ing that attention to the investigation of the sub-
jects involved, which was demanded by their im-
portance.

You inform me that the Committee on Manu-
factures have it in contemplation to report a bill
to grant bounties on Silk, and ask me for informa-
tion on the subject. As you have not submitted
any specific questions to be answered by me, I
am left to my own discretion as to the character
of the answer I am to make, and though I should
greatly have preferred a series of queries, I shall
not shrink from the responsibility involved in
your inquiry; so that if the method and manner
of my reply should not meet your expectations,
you will ascribe it to my want of ability, and not
to any lack of zeal in behalf of the Silk Culture:
and here I pray leave to assure you, that in its suc-
cessful prosecution in Maryland, I look forward
with the elevated hope, that it will bind up all her
wounds, and make her people a happy and pros-
perous one. I say this because I feel certain that
if our population so will it—if they will but ac-
cept the boon now presented to them—the agri-
cultural community, without its adding materially
to its present cost of labor, or essentially interfer-
ing with the present systems of agriculture, may,
by adopting the silk culture, increase the agricul-

tural products of our State, *three millions of dol-
lars*, annually, in value. The advantages which
would accrue to Maryland from being placed in
such an enviable position, I need not point out,
as your intelligent, and well disciplined mind will
very readily suggest them to you. In my Manu-
al, I maintain that *five millions of dollars* in an-
nual productive value may be thus added, and I
am still firmly of that opinion; but as it may be
the safer calculation of the two, I am content to
place it at *three millions*, which is only three-
fifths of the amount. To produce this amount, it
is only necessary to have 5,000 acres of land ap-
propriated to Mulberry orchards, and surely there
is no one who has any knowledge of the immense
number of exhausted fields in our State, which at
present neither contribute food to man or beast,
will doubt that this number of acres may not be so
converted, without at all interfering with our pres-
ent systems of husbandry; and this will appear
the more conclusive to your mind, when I press
this truth upon you. Poor thin soils are the best
adapted to the Mulberry culture, and though the
tree does not grow so luxuriantly therein, as in
rich loamy soils, yet the *foliage* is infinitely bet-
ter suited to the health of the worms, and causes
them to produce a silk, richer in lustre and more
elastic in its strength. If we can, then, by such
a disposition of our worn out lands, render them
the sure sources of wealth to our people, it strikes
me that the legislature should not hesitate a mo-
ment in taking such measures as will make it the
interest of the people to enter heartily into the
culture. To secure such lasting benefits, the cost
to the State, of a few *years' bounty*, should not
enter into her calculation; for, as the *money*
would be given to our own citizens, the *loss*
would not be felt, as it would only be transferring
from *one pocket* to that of *many*, or in other
words, putting the capital of the State, which
would otherwise remain unproductive, into pro-
ductive circulation, thereby making it perform its
legitimate office.

If we look at this subject with the comprehen-
sive eye of a statesman, we can arrive at no other
conclusion, than that there is no *option* left to
Maryland. With her it is a matter of *duty*.—
Self preservation points at once to the only course

she can pursue, consistently with a proper regard
to the interests of the people, and the permanent
prosperity of the state. *Pennsylvania, Dela-
ware, New Jersey*, and other states, have granted
bounties, and if we *halt* now in following their
example, as sure as the sun rises in the east, and
sets in the west, so surely will our capital and the
most enterprising of our citizens quit our soil,
and migrate to some one of the neighbouring
states, where bounties on Silk are granted. How
can it be expected, that they can compete with
their neighbors in the silk culture, unless the state,
with parental care, shall place them on an equally
eligible footing? If such a thing should be ex-
pected, I fear disappointment would be the frui-
tion of any such ill founded and unreasonable
hopes; for although I hold the patriotism of the
sons of our gallant old state in as high apprecia-
tion as any other man living, I cannot conceive it
possible that their love for the soil that gave them
birth, would induce them to enter upon a project
so hopeless as would be the competition with their
neighbors, in the silk culture, against such fearful
odds. If the neighboring states had not already
granted bounties, there would be some discretion
left to us; but as the question now stands, we
must follow where *example* leads, or with folded
arms look on and see our citizens and their means
departing from us. I will not entertain a thought
so much at variance with the dictates of common
sense and prudence—so directly at war with the
intelligence of the age—to suppose for an instant,
that the legislature would pursue a policy at once
so unwise and suicidal. The enterprise is a new
one to our farmers and planters, and hence it is
proper, that they should receive something like
an indemnity for adventuring upon it; for what-
ever they may receive by the way of bounty, will
be but as a *loan* by the state, on which she will
not only receive interest, but *compound interest*,
as the riches of her people are her wealth, and
their property the only true sources of her great-
ness and glory.

I will briefly sketch a few of the advantages of
the silk culture—and to begin—

1. It will bring into profitable occupation the
worn-out lands of the State, which, without great
expense, cannot be improved so as to make them
lucrative.

2. It will give employment to women, children, and aged and decrepit persons, and render those classes, which are now burthens upon society, so many sources of profit.

3. It will add to the *numerical* as well as *financial* strength of the state, by increasing the means of human support, and by converting a large portion of the material of labor which is now lying dormant in the state, wholly unproductive, into the mediums of accumulative industry.

4. By rendering the worn out fields profitable, it will place it within the power of their owners to improve those they may own adjacent, and thus, indirectly, will increased value be imparted to the surrounding land, occupied in the other pursuits of husbandry.

5. By offering the *inducement* to our citizens to remain at home, it will prevent emigration.

6. By the establishment of numerous silk factories in our midst, it will create *home markets*, not only for the raw material, but for the surplus breadstuffs, provisions and vegetables of the farmer; thus saving to him the cost and labor of distant transportation, while it will also impart additional value to them by increasing the demand.

Having thus shadowed forth some of the resulting benefits, and mentioned, in the general, the presumed annual value of the silk business to Maryland, it may be proper to furnish you with the *data* upon which I found my calculation. After the most careful research that I have been able to make, and after weighing with religious accuracy, every thing that has come under my notice, I have honestly and sincerely come to the conclusion, that an acre of land judiciously planted in the *Morus Multicaulis*, will yield foliage enough to feed one million of worms. In this opinion, I feel that I am borne out by the experience of the world, and by the corresponding opinions of many distinguished men. I know that it is the opinion of Mr. Whitmarsh, who has for many years been engaged in the silk business in all its branches—who is a practical man in every sense of the word—that an acre of ground planted in the Alpine Mulberry, can, by prudent management, be made to yield 333½ lbs. of silk. But with the view of being rather *under* than *over*, I have taken three-fifths of that product as the basis of my calculation. This then will give us 600,000 as the number of worms that can be fed from an acre; and as 3,000 cocoons will make a pound of silk, so will 600,000 make 200 lbs.—Having reduced the *acreable* capacity from 1,000,000 to 600,000, I shall, as a matter of course, reduce the charge for feeding and reeling in the

same ratio. In my Manual account current, the expense attending an acre, is set down at \$204.95, taking off then two-fifths of this amount, leaves \$123.07 to be charged to 600,000 worms, which will make the account in this new view, stand thus:—as 1 lb. of raw silk is worth \$4, so will 200 lbs. be worth the gross sum of \$800, and \$123.97 for feeding and reeling, being deducted therefrom, leaves the nett acreable profit, \$676.93. Besides other authorities, I maintain that the experiment of the Rev. Mr. McLean, of New Jersey, more than sustains what I here claim as the acreable product; for after stating the yield of his 1-16th of an acre, he gives it as his belief, that he could have fed a sufficient number of worms to have made 60 lbs. of cocoons, which would have been at the rate of more than 106 lbs. of raw silk to the acre, from roots one year old. If then one year old trees will, as they did, produce this result, I maintain that trees in the fourth season, would greatly exceed my present estimate—nay, I believe that they would reach our original one. But it is unavailing to speculate on this head further; and to prevent all possibility of disappointment, I will only claim for the acre the ability to sustain 600,000 worms.—Now if we multiply this by the 5,000 acres of land to be appropriated to the culture, it will give us as the aggregate product, 1,000,000 lbs. of raw silk, which, at \$4 per pound, would be worth \$4,000,000, being, as you will perceive, at this greatly reduced rate, *one million* of dollars more than I claim; a sum you will, I think, admit more than ample to cover all possible contingencies. This is the aggregate value of the product as *raw* silk, and I presume you are aware, that every pound of it which might be converted into sewing silks or twist, would receive an additional value, per pound, of from \$3 to \$7, according to the degree of skill with which that labor might prove to have been performed. Now, as a considerable portion would be converted into *sewings* and *twists*, it is but fair to say, that at least \$50,000 of such value would be thus created; but as I am content with the result of the silk in its *raw* state, I will leave those values when created to speak for themselves. But while I am on this branch of the subject, I would remark, that by appropriating 5,000 acres of the old worn out fields of Maryland to the culture of silk, it would give employment to 50,000 children, 6 weeks in the year, and to 11,737 women, constant employment throughout each year, thus creating a *money value* of labor in the state, more than now exists, of between 6 and \$800,000, according to the ta-

riffs of wages, and this too, produced by a description of persons, who contribute little or nothing towards their general support. Can you imagine a more sublime prospect, than to see nearly sixty-two thousand persons thus brought into active employment, who have hitherto served only to consume the products of the labor of others? Why, Sir, let the bounty law once receive the sanction of our legislature—I mean *such an one as is called for by the interests of our people*—and we shall hear no more accounts of this poor man, or that, with his large family of children to *support*: the tune will be changed.—Instead of the children being looked upon as incumbrances and burthens, as they really now are, to the poor and industrious in the humble walks of life, they will be designated as they really will be, as *helps*. Every small farmer, with his wife and five or six children, from six years and upwards, will have all the *labor* necessary to enable him to feed one million of worms, by which he may add to his yearly income, the gross sum of \$800. Think you that our industrious planters and farmers would go away from the haunts of their childhood to seek homes in the far west, if the silk culture formed a branch of the agriculture of Maryland? No sir, they would not; for with this additional source of wealth opened to them, they would not only stay, but stay and get rich.

There is another view of the subject, which I look upon as important, and to which I would direct your attention. I allude to its bearing in a national point of view, as connected with the general agricultural products, and with the exports and imports of the country, and the influence of these on the condition of the people.

During the financial year, ending the 30th of September, 1837, we imported \$140,989,217 worth of goods, and exported during the same time, \$117,419,376 worth, leaving a *balance against* us, of \$23,569,841.

During the same period, we imported *wheat flour* to the value of \$122,650, and of wheat, \$4,154,325, making an aggregate of these two items, of \$4,276,776, while our exportation of the same articles during that period, was but \$3,074,475, leaving a *balance*, here against us, of \$1,261,501, for the very bread we consumed.—Of *sugar* we imported \$7,205,904 worth, while we exported but \$76,181 worth, leaving a balance against us in this item, of \$7,129,624.

I have thought it might be instructive to pick out these articles, with a view of showing how disadvantageously for us they compare together;

nor do I consider it less instructive, that we should reflect well upon the *fact*, which the statement of *imports and exports* unfolds—it is indeed a startling truth, that we bought during the year 1837, upwards of twenty-three and a half millions of dollars, more than we had available productive means to pay for. Surely then, we should gain wisdom by an experience like this. Let the other *fact*, which is disclosed by these statements, have weight—I mean that one which relates to the *importation and exportation of wheat and wheat flour*. By this we learn, that America—who once furnished a large portion of Europe with bread-stuffs, within a few short years, owing to the precarious nature of the wheat crop—has become a dependant upon Europe for a part of the bread we eat. But humiliating as this may be to us, as the inheritors of a soil of such boundless extent, I hope it will not be lost upon us, but that it will carry a *moral* with it, by which our people will profit. With \$63,240,101 worth of cotton, \$5,795,647 of tobacco, and \$2,309,279 of rice, exported in 1837, still we were indebted to foreign creditors, in the enormous sum of upwards of twenty-three and a half of millions of dollars. Nations, like individuals, who buy more than they can pay for, must, unless a change take place, come to the wall sooner or later. How then, I would ask you, is this thing to be remedied? There are but two ways by which it can be done. The one is by *retrenchment*, the other by *increased production*. The first method would be highly proper, if nothing better could be done; but we have it in our power to cover this *excess*, by introducing a new *staple*: let us then do so: that *staple* is *silk*. There is no difficulty in accomplishing this, if the legislature of the several states do their duty. Let them hold out the proper *inducements*, and the American people will come up to the rescue. In all enterprises of a novel character, *States* must risk something for the general good.

And as it must be obvious to all, that, without some additional staple, we must expect to remain mostly the *debtor* nation, and there are all the necessary facilities for introducing the silk culture amongst us, why should we longer delay the good work? If evidence of the good effects of bounties be wanted, look at the influence which the *wheat* bounty has had in the state of *Maine*: from being dependent upon the wheat growing states south of her, for 3-5ths of her wheat bread, she now produces within a fraction of all she consumes; and this law has been in operation not three years yet. I know there are some *croak-*

ers, who contend that we can never become a silk raising people; but we should recollect that the great New York Canal was denounced as the *big ditch*. *De Witt Clinton*, its projector, was for a time *sacrificed* for using the judgment of a *statesman*, instead of that of a politician; but that *big ditch* has rendered him immortal, and added millions to the value of the property of the Empire State. Why should we not become a silk producing nation? We have a congenial sky and soil for the business, and an intelligent and enterprising population withal. Every thing must have a beginning. It is but 103 years since the first half bushel of rice was accidentally introduced into South Carolina, and the last year, besides supplying the home demand, which is considerable, largely upwards of two millions and a quarter of dollars worth in amount were exported: and still more striking is the history of cotton:—in 1783, so little was thought of it, that no provision was made in the treaty concerning it, and yet in 1837, only 56 years, besides the immense amount consumed by our factories, it furnished \$63,240,102 worth for exportation, being more than 60 per cent. of the entire exports of the whole United States. Let the silk culture be fostered as it ought to be, and in less time than that we have named, its product will equal that of cotton. With proper energy, in ten years it could be made to give twenty millions to our exports; and for myself, I look forward to the day, and that not far distant, when the two great staples of *cotton* and *silk*, will enable us to present to the world, the glorious condition of being a *creditor nation*. The demand for silk goods has increased with an astounding rapidity. In 1821, our imports were less than *four and a half millions*, whereas, in 1836, it had amounted up to within a fraction of *twenty-three millions* of dollars, in amount. Now let me ask you, would it not be quite *comfortable*, if we could pay for these manufactured articles with the *raw material*? There is nothing to prevent us from so doing, as it would require only 1200 acres to be appropriated to the culture, in each of the 26 States of our Union, to give us more than that sum.

When I commenced this reply, I had no idea of extending my remarks beyond a page or two; but the subject has led me astray, and you will be pleased to pardon me if I have unnecessarily taxed your patience, and believe me

Yours, very truly,

EDWARD P. ROBERTS.

Haul out your manure upon your corn ground, and thus save time.

LARGE BEEVES.

Mr. Kimberly, one of our enterprising victuallers slaughtered on Thursday last, three bullocks bred by that intelligent and public spirited grazier, *George Cunningham, Esq.*, of *Hardy County*, Virginia. We saw them before and after they were slaughtered, and without exaggeration can affirm, that we have seldom beheld three nobler animals. The nett weight was, we learn, 4053 lbs. and the meat was most beautifully marbled with alternate layers of lean and fat, and each as well disposed of as to satisfy the taste of the most fastidious judge. We learn that Mr. Cunningham got \$1000 for the three beeves, and richly does he deserve to be well paid for the indomitable perseverance with which he pursues his vocation; the consummate judgement he displays in the improvement of his stock, and for the liberal spirit he manifests in the attainment of his object.

Though in our youthful days, when the blood run quickly through our veins, the renown of the warrior had so a deep hold upon our affections, that we never listened to the spirit stirring drum and ear piercing fife, but they discoursed most excellent music to our senses, and the name of the hero of a battle was never mentioned in our presence without causing the heart to expand and the pulse to beat quicker; but now when time has bleached our locks, we find ourself able to look on the prowess of arms, without feeling any other emotions than those of soberness and sadness,—and without wishing to detract from the merit of the military chieftain who by the splendor of his genius, his generous bearing in the field, and the originality and boldness of his combinations, may have achieved a glorious victory—we say without wishing to detract from the merits of such a one, we would rather have been the breeder of three such beeves, than to have won the best fought field that ever wreathed a halo of glory around the brow of the most successful commander, for our's would be a *victory* unstained by blood.

Childs' Razor and Sharpening powder.—We refer the reader to the advertisement of this excellent preparation, and from a long use of it, can conscientiously say, that it is the only powder, or paste, that we have ever used that gave us satisfaction. It is more than twelve months since our razors were honed, and during all that time, we have never failed to get a good edge by simply dusting our strap with the powder, and passing them a few times over it. Those who enjoy the

uxury of an easy shave, should not fail to provide themselves with a few boxes, as in so doing, they will be certain of avoiding those tortuous operations of dull implements, which involuntarily bring the tears into a man's eyes, and distort his features into any thing but an amiable shape.

Deception.—We learn from the *Northampton (Mass.) Courier and New England Farmer*, that slips of *Baswood* and *Poplar* have been sold for the genuine *Morus Multicaulis*. We therefore warn the public to be cautious in purchasing.

The embarrassments of our country are and have been an absorbing subject for a considerable time past; our own opinions on this subject shall be freely given. It will be seen by our former numbers, that we are in favor of an entire change in agriculture, and that we should not pursue the same course that we, and our fathers have done, from the first settling of our country, when it was covered with an accumulation of vegetable matter, which had lain for ages undisturbed by the plough. The rich mould that caused, what is now called *Cumberland*, as soon as the matted forest was removed, produced with but little cultivation, the most luxuriant crops, the cane supplied their stock with food for the winter, and the rich herbage, (peavine and the like,) a sufficiency for the summer. A change came, the cane and peavine and buffalo-grass began to fail; a course was then had to the picking off corn blades, saving shucks, &c.,—these were thrown on the ground, in the mud frequently; this course with some few exceptions, has been kept up ever since. Many now throw the food for the cattle in the lane, road or some place where a large portion is destroyed, which with the manure is lost. About the time the range failed, the culture of Cotton and Tobacco was introduced on a pretty large scale; they succeeded very well; a large amount of money was brought into the country; this brought with it the introduction of many luxuries, which had not, until then been much used; the raising of these crops soon became precarious, the prices fluctuated, sometimes very high, and sometimes very low; having went largely in debt, and done as poor Richard's friend did, of whom he said:

"The women for tea, forsook sewing and knitting,
And the men for wine, forsook hewing and splitting."

In these depressions with our *artificial* wants constantly impelling us forward, we were rendered as a community, miserable. Our wants were many, our means for supplying them were few. With our lands much exhausted, our crops spare, and we in debt, is our present condition. Now we say change, yes, change; let us deny ourselves of some luxuries until we can give as good reasons for indulging in them, as Mrs. Franklin did for buying the silver spoon and China bowl, that they were able to afford it.

For the improvement of our lands let us feed our out stock in a place where all the refuse food and manure may be ploughed in, and become

food for crops; this may be easily done, by removing a few pannels of fence, (if you have no small field for the purpose,) carry out all your manure from your stables, barns, &c.,—spread this just before ploughing in, as the action of the atmosphere extracts most of the gasses which are beneficial as food for plants, by being long exposed to it. In this way a small quantity of arable land may be made to produce more than double the quantity it will in the ordinary way. Sow that which is exhausted most in red clover; lay down two or three acres to each hand in meadow; for this purpose, hilly land, and especially, north hill-sides will answer a valuable purpose, even where they are too steep to be easily cultivated. Lands in England rent much higher per annum, for a long space of time, than for a limited one; simply because they can have time to get them well set with grass and reap the benefits, and manure them so as to make them more productive. Turning in the stubble on fallow land should never be delayed until spring if it can possibly be avoided, for the same reasons that manure should be covered, to prevent the escape of the nutritious juices. We have heard some farmers say that burning off the stubble, was as profitable as turning it under. This we most positively deny, especially, if the fallowing is done before all the nutriment is extracted by the air; and even the vegetable fibre is more beneficial than the very small quantity of ashes produced by burning. This course will, if adopted, produce in a few years a great change in the appearance of our country. One half the lands which we now cultivate, will produce much more than they all do now. Thus far we have insisted on a deviation from the beaten track; but let us not be misunderstood, keeping the embarrassment in view, we would say to all who have the means, change immediately, and those who are unable to go fully into it now, we say make one or two more crops of tobacco; yes tobacco—a name that we have scarcely seen in an agricultural paper in a year; for a few years we have no doubt but it will bear a fair price. During which time keep an eye to the improved system of farming; but never become willing to submit to the drudgery of a tobacco raiser with all its disadvantages through life. Follow it for the present as a necessary evil, which circumstances and not choice force upon you.—*Cumberland Farmer*.

[From the Maine Farmer.]

GRAIN WORM.

MR. EDITOR:—It is a matter of regret that the wheat raising business, in at least some parts of our State, is likely to meet with a serious check from the ravages of the *Grain Worm*. When the attention of farmers was beginning to be turned to this business, when encouraged by the munificence of the Legislature, and when from practice they were fast gaining a better understanding of the business, we could all have hoped that the production of wheat would have increased, till our State had become independent of other countries for this important article of sustenance. But this "little rascal" is a *great enemy*; and how successfully to repel his attacks, I confess, I do not know. Perhaps it would be the part of *prudence* not to risk too much in his way; that is, not to depend *chiefly* on wheat, but

raise more corn and other grain; and on the other hand it would be the part of *valor* not to give up the field and abandon raising wheat altogether, but try and see if we cannot by some means prevent the destruction which is made.

In order to prepare to guard against injury from this insect, it appears to me that it is important that we ascertain the *time* when the mischief is done, or the stage in the growth of wheat when the fly deposits its eggs. I find that the *general* opinion is, that this time is when the wheat is in blossom. But from some observations of my own, and of others, I am inclined to think this is not the time in question, but that the fly deposits its eggs before the wheat heads out. I have noticed little flies that appeared to come out from the sockets of wheat before it headed, and it has been observed by others, that they have discovered eggs and small worms, by stripping the leaves of the wheat, before the head had grown out. It appears more reasonable to me, that the fly deposits its eggs *at once* in the socket of wheat before it heads, and that the worms attach themselves to the heads as they grow out, and find their way into the kernels, than to suppose that the fly crawls round the head and lays its eggs *singly* in each kernel at the time of blossoming. I think we should examine into this thing: for if we apply a *good* remedy at the *wrong* time it will be unavailing.

B. R.

Winthrop.

MR. EDITOR:—In compliance with your request that all those who received portions of your Italian Spring Wheat for experiment, should communicate the result for your paper, I herewith give you as correct an account of the portion I received, as my memory will afford.

I received about one gill, or twelve hundred grains—sowed it on the 15th April, in drills eighteen inches by four.—The soil, for one foot deep, was rotted chips—loose and light as possibly could be. One thousand grains came up, and when about three or four inches high, a tremendous storm of wind and rain beat it entirely down, which was the last rain that fell on it; consequently, my crop was much lighter than I might otherwise have calculated upon, though it sprang up vigorously, and in consequence of the lightness of the land, or some other cause, about one third of it fell down, numerous shoots springing up from these roots, which did not come to perfection. I threshed and cleaned my wheat, though not without considerable loss. The product weighed eight pounds and a half, and measured one and a half gallon. You can calculate the increase. There was some other Spring Wheat sown in the neighbourhood about fifteen days earlier, which turned out near the same. I do not consider mine a fair trial, and shall give it another experiment.

C. J. GUINN.

Gallatin, Dec. 4, 1838.

The increase in the case described above, is at the rate of forty eight to one,—the season too, being unpropitious. Too much reliance, however, should not be placed in limited experiments of this character. We have, for instance, heard of some experiments with the Spring Wheat, in which the crop was certainly killed with kindness; and, on the other hand, such results as this communicated by Mr. Guinn, could not reasonably

be expected upon a large scale, with our improved methods of cultivation. These experiments however, are exceedingly interesting, as showing what might be done by a more perfect system of tillage than that at present practiced among us in the culture of wheat; and are also, certainly, so far as the results have been communicated to us, decidedly encouraging to farther trials of the Italian Spring variety to ascertain its adaptation to our soil and climate.—*Edt. Ten. Far.*

BOUNTY ON WHEAT AND SILK.

Our cotemporary of the Gazette at Greenfield is at variance with us concerning the policy of granting a bounty on Wheat. We did not intend to express positive hostility to this measure, but rather for the purpose of elucidating remarks from others, did we advance some principles which conflicted with the wisdom of bestowing bounties on articles of agricultural production. We are aware that the object of the present bounty was to overcome the misgivings of farmers, that wheat could not be raised profitably in Massachusetts. This result could not be determined without a thorough experiment, and that experiment would not be tested while there was danger of individual loss, unless encouraged by the aid of a government gratuity.

The experiment of the past year, we conceive, is sufficient for this purpose. If wheat can be produced as a profitable crop, it will hereafter be cultivated without legislative aid. If it cannot, it had better be abandoned, and those productions substituted which are more suited to our soil and its capacities for production. Wheat can be raised in Massachusetts, and no one doubts but what it can be grown of an excellent quality. But yet will the aggregate yield be as good as the corn crop, for which it is substituted in many places, even *with* the bounty?—If not, Massachusetts had better pursue her accustomed course, raise crops such as the chemical and vegetable properties of her soil will most abundantly yield, and purchase any deficiency in bread stuffs from the fruits of her manufacturing and commercial industry. We wish this fact could be ascertained—how much wheat beyond ordinary years was raised the last season, and how great was the diminution of other crops during the same period of time.

The bounty on silk given by the legislature, cannot be met by the same objections which are applicable to the wheat bounty. The growing of silk is a new business, and almost unknown to the people of Massachusetts. To carry it on successfully, demands fresh knowledge and experience, neither of which can be acquired without hazard, which few farmers are willing to encounter, unless certain of some remuneration. The raising of silk will give employment to the young and infirm, without encroaching materially upon the time of the farmer. But what is essentially important, it is not to be substituted for any other crop; not to displace any other agricultural pursuit,—but a new kind of production, which is to aid in enhancing the income of the farmer. If the profits of the agricultural production are increased by a new kind of production, not only do individuals gain, but in the aggregate, the State grows richer. Hence this bounty bestowed on

raw silk and cocoons is immensely important, inasmuch as the farming interest receives aid, and the wealth and resources of the State are multiplied, by the addition to its present resources of a new agricultural production.—*Northampton Courier.*

DOMESTIC SILK.

Although we have shown, time after time, by the clearest and most convincing evidence, that the Silk Business will become one of the most profitable and consequently one of the most important branches of industry in this country; yet the fear is continually expressed by men of superficial minds, and those who doubt every thing that does not emanate from themselves, or in which they may not be originally large participants; as to the hardihood of the *Morus Multicaulis*—the congeniality of the climate for the worms—a market for raw material; the efficiency of our machinery for the manufacture of sewing silk—as well as the general fitness of things for going into the business at all. These fears and objections are generally wound up with the sweeping assertion, behind which they entrench themselves—that the country is not suitable for the raising of silk—and IT CAN'T SUCCEED.

We have said that we have repeatedly shown that these fears are utterly groundless; and no one who will view facts with an unprejudiced eye, could help being thoroughly convinced of their fallacy. There is now in Germantown, a manufactory of sewing silk from the domestic material; and the article which is here produced, is as far superior, in every respect, to the best imported Italian, as it regards evenness of the thread, strength and beauty of lustre, as we can well conceive it possible for two similar articles to be. Our tailors prefer it infinitely to the imported; and we understand the demand already for it in Philadelphia, is more than one hundred per cent. greater than the supply. The manufacturers sent fifteen pounds to market within the past week, for which a very high price was realised.

Our farmers should embrace every opportunity in acquiring a thorough knowledge of the Silk Business, and make immediate arrangements for commencing it. Trees, it is true, are now high, but as they are not likely to be much cheaper the ensuing season, a few hundred should be bought as a beginning, which with care, would in a twelve-month, afford them a supply of leaves sufficient to feed a considerable number of worms.

From the Silk Culturist.

HINTS ON FEEDING HORSES.

IN FEEDING HORSES WITH GRAIN, the proper quantity of the respective kinds is regulated by weight, for in this proportion are the different kinds considered nutritious. As for example, we give to a horse per day half a bushel of oats, the weight of which is 17lbs., and if we wish to change to other grain, as barley, rye, or Indian corn, the same weight will suffice; and as these grains are much heavier than oats, a proportionate less quantity, by measure will suffice—Another rule, deemed important, is this, that whenever heavier grain is substituted for oats, a quantity of fine cut straw should be added, as a substitute for the husk of the oats. This induces a more perfect digestion of the grain.

The practice of giving dry grain to horses when pastured, or fed with green cut grass, is condemned; for the grain thus given, is never perfectly digested, on account of the effect of the watery juices of the grass upon digestion. When dry grain and green feed are given, as much interval should be allowed between the dry and green food as circumstances will permit.

Von Thaeer considers 8 lbs. meadow hay equal in nourishment to 3 lbs. of oats; that hay improves by age, if well kept, and is most nutritious for horses when a year old; that the second growth is not equally nourishing; and that hay should not be unnecessarily exposed in making, the pleasantness of its scent being peculiarly gratifying to horses and cattle.

In Holland and Flanders, farm horses are uniformly soiled during summer. A horse is supposed to consume from 84 to 100 lbs. of green food per day with occasional grain. An acre of clover, at two cuttings, will give twelve tons of green food, and hence half an acre of clover, fed green, will suffice for a horse four months.

It is also a general practice in Flanders and is extensively adopted in Great Britain to convert the entire food into manger meat, that is, to mix the cut straw and hay, the grain and the roots, or whatever is to constitute the provender for the day, and to feed altogether in the manger, in regular messes. The value of this mode of feeding is alleged to consist:—

"1. In its requiring a more thorough mastication of the food than when it is given in the common way, thereby assisting digestion, and consequently promoting the nutrition of the animal; for, it is not only true that old horses lose much of the power of mastication, and that young and greedy cattle are apt to devour a considerable part of their corn entire, when it is given alone, which passing through them in the same state affords no kind of nourishment, but all animals are known to derive nourishment from their solid food, in a certain degree, in proportion to the care with which it is chewed.

"2. It is consumed in less time.

"3. By the mixture of the materials, some proportions of which, as damaged hay, or straw, might be refused if given separately, an equal consumption of the whole is secured.

"4. By its admitting of being more readily weighed, or measured, than when given separately, it can be more accurately distributed to each horse; on which it may be observed, that more injury is often done to horses by allowing them an unlimited quantity of rack-meat (uncut hay in the rack,) than even by stinting them to a scanty allowance; for they will not only pass whole nights in eating, when rest would do them more service, but, by this extraordinary distention of the stomach, its powers are weakened, and their general health is injured.

"5. It prevents waste, and consequently goes farther."

Mr. Wiggins, whose daily business extends to the feeding of three hundred horses, estimates the saving by the feeding entirely in this way, in the manger, at one sixth.

Rye is considerably employed as horse feed in America, particularly in Pennsylvania. It is generally coarsely ground, and mixed with cut straw or chaff, and moistened, by which the mass is incorporated.

Barley is extensively used in the south of Europe, in Asia Minor and in Persia, for feeding horses, for the reason, probably, that oats, being indigenous to colder climates, do not grow well in these countries. In the first of these countries it is uniformly fed with straw. Six bushels have been found, on trial, to be equal to eight bushels of oats. Barley contains twenty per cent. more starch than oats, 5 per cent. more saccharine matter, and 27 per cent. less husk.

British writers have furnished us with estimates of the annual expense of keeping farm horses. One of these before us gives the aggregate expense of a two-horse team and driver at about 60/(\$400.) This includes the interest on the cost of the team and implements, 270/ and 10 per cent. for repairs and deterioration. We state this fact for the purpose of calling the reader's attention to it. It imports that allowing for the days when the team cannot labor, and assuming 260 working days in a year, that a team and driver should earn more than \$1 50 a day for 260 days in a year, to pay cost; and that all they fall short in doing this, is absolutely loss to the owner. The keep, in Britain, is probably higher however, than it is with us. Yet we are persuaded that few among us duly reflect, upon the cost of maintaining a horse-team in a plight requisite for doing good service. In Britain a team of good horses is considered adequate to the cultivation of 40 to 60 acres in tillage crops."

From the Yankee Farmer.

DRILL PLANTING AND HILL PLANTING.

MR. EDITOR.—Not much of our Indian corn at the north is planted in drills. People usually plant in hills and make rows both ways. Where manure is put in the hill, drill planting would be very inconvenient. If the corn is to be hilled up, and the roots buried deep, with all the loose mould the plough and hoe could command—as the practice has been—it would seem necessary to place the hills at a distance from each other both ways in order to make room to gather up such a quantity of mould. But the fashion is now rapidly gaining ground, of suffering the corn roots to choose their own depth. One objection then, to drill planting is done away, and since it is proved to be pernicious to place a heap of manure in the hill rather than to incorporate it with the earth, there would seem to be no objection to adopting the drill method unless it be that it requires more labor, there being more hills or places in the row for the seed to be dropped and buried. The advantages of planting in the drill method are numerous. In the first place, you obtain more corn. It is believed that all who have obtained premiums for large crops have planted thus. Secondly, by not attempting to make rows both ways, you make them much straighter than you otherwise would and this gives us no small advantage in the hilling. If the dropper of the corn pursues direct the track marked out by the drill plough he will not be so likely to make short and sudden offsets as if he dropped across the drill or plough mark. This planting in nearly a direct line enables us to plough or to harrow very close to each stalk—saving entirely the use of the hoe after the first hilling. A skilful man, in mellow ground, with a wide

tooth harrow or cultivator, will so mannaage as to throw a little mould toward the corn, just enough to make the whole fresh, and then the hoe is not needed.

Another advantage is, you can generally have longer rows, and you can go on a side hill with them, making your harrow or your plough tracks nearly level, so as to prevent the washing your mould down hill in case of sudden showers. After all, the labor of planting in drills is but a little more than in hills; for most men, and all boys, drop their corn in very crooked rows when they attempt to drop them across the furrows marked out; and if you mark out both ways, the labor of hill planting is greater than that of drill planting.

On the whole I have come to the conclusion that the advantages of making rows but one way through your field outweigh any to be derived from the other practice.

Yours,

W. B.

No little has been accomplished for the improvement of Farm Stock, within the last fifteen or twenty years, by the importation of Foreign Breeds of Cattle, and we know of no way in which men of ample means can better employ their money. The good effects of introducing choice blooded horses and black cattle from abroad, are visible throughout our own State, although we regret to add we are much behind other members of the confederacy in this particular.—Instead of the coarse haired, large headed, and heavy limbed brutes, that were formerly seen in our pastures, we now find the sleek coats and symmetrical proportions that bespeak high breeding and gentle nurture. It would be well for our farmers and planters, whose individual means are not generally adequate to the purchase of the costly specimens of the various species of horses, cattle, sheep, &c. to be found in distant lands, to form themselves into societies, and procure for the benefit of their neighborhoods the breeds that are particularly valued. In this way an infinite deal of good might be done at an expense comparatively small to each contributor, and great benefit would accrue to the agricultural interests at large. The trouble and charge of supporting the finer descriptions of stock are not greater than are required for the more ordinary, whilst the value of them in the market is much greater. A few hundreds of dollars expended in this way would increase the wealth of our farmers in the course of a few years to an extent of which they are not aware.—*Poulson's Advertiser*.

From the Cultivator.

BRINING AND LIMING SEED WHEAT.

Trenton, Oneida co. Dec. 14, 1838.

J. BUEL, Esq.—Sir—Having observed in the Cultivator, some difference of opinion as to the effect of brining and liming seed wheat to prevent smut, hoping by stating to you the little experience I have had on the subject, I may do no harm, but be of some benefit, is my excuse for addressing you at this time.

It has been the practice among farmers in this region for something like forty years, to wash and lime their seed wheat to prevent smut. Having noticed in a newspaper, nearly thirty years since, an account of a vessel loaded with wheat having been sunk on the coast of England, and before it

could be taken out was so saturated with salt as to render it unfit for bread, some of it was used for seed, and where that was sown, it was observed there was but little or no smut, while in the same neighborhood, where other wheat was sown, the wheat was quite smutty, which circumstance led to the practice of using brine for seed wheat. Seeing that lime and salt, when separately applied, were beneficial to prevent smut, it occurred to me, if both were applied at the same time, the remedy might be effectual. I accordingly adopted the practice of washing my seed wheat in a brine as strong as can be made, stirring it until thoroughly wet, say from five to ten minutest drain off the brine and spread the wheat on a floor; put on slaked lime that is dry, (when a sufficient quantity of wheat is washed,) four quarts to a bushel is sufficient; work it over with the hoe and shovel until each kernel is covered with a good coat of lime; then spread it over the floor to dry several days before sowing—the drying is necessary to prevent the moisture of the ground causing the lime to cleave from the kernel before the harrowing is finished. There is no danger of injuring the wheat by its lying after being limed—have had it lie two weeks or more—and was never troubled with smut since the above mode of preparing seed was adopted, and am firmly of the opinion, when the seed wheat is well prepared as above stated, the remedy against smut will be found effectual. The circumstances stated by J. Hathaway, Esq. last spring, of his neighbor having sown some of his wheat soon after liming, and was prevented from sowing the remainder for several days on account of rainy weather—the former being some smutty, while the latter had little or none—I think goes to show the benefit of letting the wheat dry before sowing.

Others may have prepared their seed wheat in the manner above stated before me, but I had never known an instance. After having prepared seed wheat as above for several years, and being satisfied of its good effects, I sent an account of the above mode of preparing seed wheat, to the editor of a newspaper in Utica, Mr. Maynard, I believe, which he published about twenty years ago. Yours very respectfully,

JOHN STORRS.

GREAT SALE OF MORUS MULTICAULIS.

The great auction sale of *Morus Multicaulis* Trees, on Saturday, was attended by such an immense concourse of purchasers, that the large room of Mr. William H. Franklin, the auctioneer, could not contain them. The trees were remarkably fine, and had just arrived from Mobile. They appeared to be of two years growth, although it was stated that they were but one year old. The prices ranged from \$4 each tree for the large size down to \$1 75 for the smallest trees, which was the least price that any were sold for.

Public opinion seems to set decidedly in favor of trees of American growth, as they will yield about thrice as many young plants the ensuing season as the imported ones, besides which those that have arrived from abroad, are mostly in a ruined and decayed condition, and in fact, the last and only large importation is a mass of decay and rubbish, not worth the freight.—*N. Y. Com. Adv.*

BRITISH GARDEN SEEDS, &c. &c.

ROBERT SINCLAIR, JR. & CO.

ARE JUST OPENING a superior lot of GARDEN and European FIELD SEEDS, received by the several late arrivals from Europe and from their Seed Gardens near this city. The principal Seeds received and for sale, are viz:—

1100 pounds EARLY CABBAGE Seeds consisting principally of Early York, Bullock's-heart, Emperor and Flat Battersea.

600 pounds LATE CABBAGE SEEDS—the Flat Dutch, Drum-head and Globe Savoy are included in this lot, raised under our inspection and are particularly fine.

700 pounds London Scarlet short top RADISH,—early, round, long White, Yellow Turnip and Spanish RADISH SEED.

8 casks BEET SEED, of several Dark Red Garden sorts. Yellow and White Sugar and Mangelwurzel Beet Seed.

800 pounds Rutabaga, Hybrid and other TURNIP SEED.

16 casks early and marrowfat PEAS, in prime order.

Also, London Cauliflower and Broccoli Seed, Cross and Cabbage Lettuce, Tomato, Squash, Scotch Kale, Parsnip Seed, Carrot several kinds, Melons, Cucumber, Spinach, Early Corn, bunch and pole Beans, English Windsor Beans, &c.

23 casks English and Italian Ray Grass, Scotch field Peas and Beans, Potato Oats weighing 44 lbs per bushel. Spring Vetches, White Clover, Lucern English Lawn Grass, early round and kidney Potatoes.

In store.—Italian Spring Wheat, Spring Barley, Kentucky Blue Grass, Baden and Twin Corn, Orchard, Herds and Meadow Out Grass Seed, Common Red Sapling Cloverseed, and every other variety American field Seed.

For sale as usual.—AGRICULTURAL IMPLEMENTS and TOOLS of every description, BOOKS on Cultivation and management of stocks.

Orders for TREES and PLANTS, supplied at the shortest notice. feb 12 w4w

FOR RENT,

A lot of ground, containing 12 acres. It is situated near the York Road, a short distance this side the first tollgate. It has on it two comfortable frame dwelling houses, and extensive and convenient arrangements for cows and horses, with a pump of excellent water. The soil and situation have been said by persons engaged in the mulberry and silk business, to be admirably suited to that branch of agriculture. The advertiser would give the land and improvements, to a person who might wish to embark in that business, for a reasonable share of the profits, the renter to be at all expense, and give his personal attention. The stabling, &c., could at a trifling expense be converted into cocoeneries. Apply at the office of the Farmer and Gardener. feb 3t

MORUS MULTICAULIS, OR GENUINE NEW CHINESE MULBERRY.

A large stock of best SOUTHERN raised, lately put into the hands of the subscriber for disposal, at 30 dollars a thousand for buds, and 20 cents a foot for main stem and root, and discount for large trade, say 5 per cent. for 500 dollars worth, and 10 per cent. for 1000 dollars or more. But as the price is still rising (now 4 cents a bud in many places) owing to the very inadequate supply for the increasing demand, it is suggested, that to prevent disappointment, those not immediately applying to secure at above prices, should expect an ADVANCE, and say in order, AT GOING RATES. Again: as the season is advancing, and little time for negotiation as to distant deliveries against early (best) time of spring planting, it is stated that no quota is to be forwarded until payment FIRST made or SECURED at place whither ordered; say HERE, Enfield, Halifax, Petersburg, Cheraw, Charleston, Baltimore, or any place in our country accessible by water or rail road conveyance. SIDNEY WELLER.

Brinkleyville, Halifax county, N. C.

Jan. 29, 1839.

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ROBERTS' SILK MANUAL.

Price per single copy, 37½ cts.—to dealers who take 100 copies or more, a deduction of 33⅓ per cent. discount will be made; to those who take a less number, 20 per cent. will be allowed.

Address E. P. Roberts & S. Sands, Farmer & Gardener office, Baltimore, Md.

CLAIRMOUNT NURSERY, NEAR BALTIMORE.

The subscriber offers for sale a general assortment of grafted FRUIT TREES, as usual—amongst them are 20,000 thrifty Peach Trees, of good size for transplanting, of the most choice varieties; Catawba, Isabella and other choice Grape Plants, two and three years old, at reduced prices by the hundred; English Gooseberry, Currant, Raspberry and Strawberry Plants. Also, many thousands of Ornamental Trees, suitable for planting in streets and lawns, 8 to 15 feet high, of the following sorts—Chinese Alantus, or Tree of Heaven; Silver leaf and Tulip Poplar; Silverleaf Sugar, red flowering and Ash-leaved Maple; English, Dutch and Scotch Elm, European and American Linden; Common and Pinkflowering Locust; Catalpa; Paper Mulberry, and the much admired European Larch; White and Red Flowering Horse Chesnut; English and other Walnut, Macelusa or Osage Orange—the four latter named trees are of smaller size. Several thousand Evergreen Trees of the following kinds—Balsam Fir, Arbutus Vitea, American and from India; Weymouth Pine; American or Black Spruce; dwarf and tree Box; Roses and other Ornamental Shrubs, Vines and Creepers, large Plants: giant Asparagus; Hop and Horse Radish Roots.

Form any other articles and further particulars see printed and priced Catalogues, which will be sent by mail gratis to persons requesting them.

MORUS MULTICAULIS MULBERRY.

The subscriber has for sale, a few thousand TREES and CUTTINGS of his own raising, at regular prices; having raised this tree for seven years, and having the advantage of much experience in raising this valuable tree, purchasers may rely on getting a genuine article in a perfect state of preservation.

Also, 10,000 MORUS ALBA, or Italian White Mulberry Trees, 2 to 6 feet high, at \$2 to \$10 per hundred, and less per thousand.

Orders sent by mail or otherwise will be promptly and carefully executed, and forwarded to any part of the U. S. when more convenient. Orders may also be left with R. Sinclair & Co., Light street, Baltimore.

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ROBT. SINCLAIR

SEEDS, PLANTS, FLOWERS.



The subscriber offers for sale at his establishment a fresh supply of GARDEN SEEDS of the very best quality; those that cannot be grown in this country he imports direct from Europe from a source that can be relied on.

Besides a large collection of GREENHOUSE, hardy ORNAMENTAL TREES and Shrubs, Herbaceous Plants, and Bulbous Roots, and a choice collection of the very finest double Dahlias offered for sale, all on reasonable terms, wholesale or retail.

Also on hand a few bushels of ITALIAN RYE GRASS, with 100 bush. ITALIAN SPRING WHEAT, of the true kind. All orders for Fruit and Ornamental Trees, or any thing appertaining to his establishment will be strictly attended to, by JOHN FEAST,

Florist & Seedsman, cor. of Lexington and Pine sts. ja 22 tf Baltimore.

SPLENDID BLOODED STOCK FOR SALE.

The proprietor of Covington farm will dispose of the following fine bulls on reasonable terms, viz.

One bull two and a half years old.

One do. six months old.

of the improved Durham short horn breed; the dam of the first was got by the celebrated bull Bolivar; for size, form and beauty they are not surpassed by any animal in the state.

Three Devon Bulls, one of which is seven years old next spring, and the largest Devon in the State. The Devons are from the stock of the late Wm. Patterson, and of undoubted purity.

Two half Devon bulls.

Two bulls half improved Durham short horn, and half Devon. One splendid bull, a cross of the Bakewell, Alderney and Devon.

One bull, half Alderney and half H.-stein.

These fine animals may be seen at Covington farm, near Petersville, Frederick county, Md. on application to James L. Hawkins, Baltimore, or to

so 11 f

FREDERICK FERT Manager.

TO THE PUBLIC.

Try the New Agricultural Establishment in Grant-street, next door to Dinsmore and Kyle.

Every article warranted to be first rate. The subscribers, grateful for past favors, take this early opportunity of returning their thanks to their customers and the public in general, and beg leave to inform them that they are now provided with a very extensive stock of newly manufactured AGRICULTURAL IMPLEMENTS, suitable to meet the call of Farmers, Gardeners, Merchants, Captains of vessels, and others, viz: 1000 Ploughs, assorted sizes, from \$4 to \$15 each, comprising of the old common Bar Shear, Winand's Self Sharpener; Woods & Freeborn's patent, all sizes, "Davis," "Sinclair & Moore's" improved Hill Side Ploughs, highly esteemed for turning the furrow down hill, with wrought or cast shears; Wheat Fans, of various sizes and patterns, from \$15 to \$50 each, warranted to separate the garlic from the wheat; Corn Shellers, from \$12 to \$20; Cutting Boxes, from \$7 to \$50 each; Corn and Tobacco Cultivators, large and small; Expanding do., Wheat Cradles warranted to have fingers of the natural growth, and Grass Scythes, &c. &c.; Castings, of all descriptions and patterns, by the lb. or ton, to suit customers, allowing a liberal discount to merchants buying to sell again—all of which will be furnished on the most pleasing terms and every article warranted to be of the best quality, in proportion to the cost price. All orders by mail or otherwise shall be duly attended to with the greatest despatch.

We have also connected in its operations with the above branch of business a complete assortment of FIELD AND GARDEN SEEDS, kept by Thomas Denny—Also Garden and Farm Tools, of various sorts and of the choicest collection, which will enable our customers to have filled entire all orders in the Agricultural and Seed Departments. mh 26 JOHN T. DURDING & CO

AGRICULTURAL IMPLEMENTS.

THE Subscriber acknowledges with gratitude the liberal patronage he has received from the public since the establishment of his Repository in 1825.—During this long period he has studied successfully his own interest by identifying them with the interest of his customers in being prompt and faithful in the execution of their orders.

His present facilities of manufacturing agricultural implements, are not surpassed by any other establishment in this country, he can therefore afford them on as reasonable terms as any other person for the same quality of work. His present stock of implements are extensive both in quality and variety, to which he would invite the attention of those who wish to purchase.

A liberal discount will be made to all cash purchasers, and to those who purchase to sell again.

The following names are some of his leading articles viz: His PATENT CYLINDRICAL STRAW CUTTERS, wood and iron frames, but all with his patent double eccentric feeders, with or without extra Knives, prices varying from \$33 to \$110, subject to cash discount, he challenges the world to produce a better machine for cutting long forage, Myer's WHEAT FAN and ELLIOTT'S PATENT HORIZONTAL WHEAT FANS, both a very superior article. Fox & Borland's PATENT THRESHING MACHINES and Martineaux's PATENT HORSE POWERS, also superior articles—A great variety of PLOUGHS, wrought and cast Shares, of all sizes and prices; Gideon Davis's improved PLOUGHS, of Davis's own make of Patterns, which are sufficiently known to the public not to require commendation; 100 CORN CULTIVATORS, also expanding CULTIVATORS, both iron and wood frames, and new plan; TOBACCO CULTIVATORS.

F. H. Smith's PATENT LIME SPREADERS, the utility of which has been made known to the public; together with a general assortment of FARMING IMPLEMENTS; PLOUGH CASTINGS of every description and superior quality kept constantly on hand at retail or by the ton; also, MACHINE and other CASTINGS furnished at short notice and on reasonable terms, his iron Foundry being furnished with the best materials and experienced workmen to amply machinery running by steam power for turning and fitting up machinery.

ALSO—Constantly on hand D. Landreth's superior GARDEN SEEDS;—In store POTATOES and common SEED OATS, TIMOTHY and HERDS SEEDS all of superior quality.—All orders will be promptly attended to.

JONATHAN S. EASTMAN,

Farmer's Repository, Pratt street, Near the Baltimore & Ohio Rail Road Depot.

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every MONDAY

	PER	FROM	TO
BEANS, white field,	bushel.	2 50	
CATTLE, on the hoof,	100lbs	10 00	11 00
CORN, yellow	bushel	86	87
White	"	85	86
COTTON, Virginia,	pound	15	15 1/2
North Carolina,	"	13 1/2	14 1/2
Upland,	"	14 1/2	15
Louisiana — Alabama	"	15	16
FEATHERS,	pound.	55	
FLAXSEED,	bushel.	1 69	1 75
FLOUR & MEAL—Best wh. wh'tfam.	barrel.	10 00	10 50
Do. do. baker's	"		
SuperHow. st. from stores	"	8 25	8 37
" " wagon price,	"	7 87	
City Mills, super,	"		8 50
" extra	"	8 62	8 75
Susquehanna,	"		
Rye,	"	5 50	
Kiln-dried Meal, in hhds.	hhd.	19 00	
do. in bbls.	bbl.	4 00	
GRASS SEEDS, wholes. red Clover,	bushel.	14 00	15 00
Kentucky blue	"		
Timothy (herds of the north)	"	3 00	
Orchard,	"	2 00	2 50
Tall meadow Oat,	"		3 00
Herds, or red top,	"	90	1 00
HAY, in bulk,	ton.	12 00	16 00
HEMP, country, dew rotted,	pound.	6	7
" water rotted,	"	7	
HOGS, on the hoof,	100lb.	9 25	9 50
Slaughtered,	"	9 00	9 50
HOPS—first sort,	pound.	20	
second,	"	18	
refuse,	"		
LIME,	bushel.	32	33
MUSTARD SEED, Domestic, —; blk.	"	3 50	4 00
OATS,	"	48	50
PEARS, red eye,	bushel.		1 12
Black eye,	"	1 00	1 12
Lady,	"		
PLASTER PARIS, in the stone, cargo,	ton.	4 25	
Ground,	barrel.	1 50	
PALMA CHRISTA BEAN,	bushel.		
RAGS,	pound.	3	4
RYE,	bushel.	104	105
Susquehanna,	"		none
TOBACCO, crop, common,	100lbs	5 00	5 50
" brown and red,	"	6 00	6 50
" fine red,	"	9 00	12 00
" wrappery, suitable	"		
for segars,	"	10 00	20 00
" yellow and red,	"	10 00	14 00
" good yellow,	"	10 00	15 00
" fine yellow,	"	12 00	15 00
Seconds, as in quality, ..	"	6 00	
" ground leaf,	"	7 00	9 00
Virginia,	"	6 00	10 00
Rappahannock,	"		
Kentucky,	"	6 00	8 00
WHEAT, white,	bushel.		
Red, best	"	1 80	1 85
Maryland	"	1 75	1 80
WHISKEY, 1st pf. in bbls.	gallon.	44	45
" in hhds.	"	41	
" wagon price,	bbls		41
WAGON FREIGHTS, to Pittsburgh, ..	100lbs	2 00	
To Wheeling,	"	2 25	
WOOL, Prime & Saxon Fleeces, ..	pound.	50 to 55	
Full Merino,	"	45 50	
Three fourths Merino,	"	40 45	
One half do.	"	35 40	
Common & one fourth Meri.	"	35 40	
Pulled,	"	30 33	
POTATOES, 60 to 70 cts. a bushel.			

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,	barrel.		
BACON, ham, new, Balt. cured...	pound.	13	15
Shoulders,	"	12 1/2	13
Middlings,	"	12 1/2	
Assorted, country,	"	10 1/2	
BUTTER, printed, in lbs. & half lbs.	"	31	50
Roll,	"	25	31 1/2
CIDER,	barrel.	1 75	2 00
CALVES, three to six weeks old...	each.	5 00	6 00
Cows, new milch,	"	25 00	40 00
Dry,	"	12 00	15 00
CORN MEAL, for family use,	100lbs.	2 00	2 12
CHOP RYE,	"		1 60
EGGS,	dozen.	31	37 1/2
FISH, Shad, No. 1, Susquehanna,	barrel.		
No. 2,	"	6 00	6 25
Herrings, salted, No. 1,	"	11 50	13 50
Mackerel, No. 1, ——— No. 2	"	7 50	
No. 3,	"	3 25	3 37 1/2
Cod, salted,	cwt.	12	13 1/2
LARD,	pound.		

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

		VIRGINIA.
U. S. Bank,	par	Farmers Bank of Virgi. par
Branch at Baltimore,	do	Bank of Virginia,
Other Branches,	do	Branch at Fredericksburg, do
MARYLAND.		Petersburg,
Banks in Baltimore,	par	Norfolk,
Hagerstown,	do	Winchester,
Frederick,	do	Lynchburg,
Westminster,	do	Danville,
Farmers' Bank of Mary'd, do	do	Bank of Valley, Winch. par
Do. payable at Easton,	do	Branch at Romney, ... par
Salisbury, 1 per ct. dis.	do	Do. Charlestown, ... par
Cumberland,	par	Do. Leesburg, ... par
Millington,	do	Wheeling Banks, ... 2 1/2
DISTRICT.		Ohio Banks, generally 3
Washington, } Banks, 1p.c.		New Jersey Banks gen. 3
Georgetown, }		New York City, par
Alexandria, }		New York State, do 1/2
PENNSYLVANIA.		Massachusetts, do 1/2
Philadelphia,	par	Connecticut, 1 1/2
Chambersburg,	1/2	New Hampshire, ... 1 1/2
Gettysburg,	do	Maine,
Pittsburg,	2 1/2	Rhode Island, 1 1/2
York,	1/2	North Carolina, ... 3 1/2
Other Pennsylvania Bks. 2		South Carolina, 4 1/2
Delaware [under \$5] 4		Georgia,
Do. [over 5]	1 1/2	New Orleans, 7 1/2
Michigan Banks,	10	
Canadian do.	10	

FOR SALE,

A valuable FARM of prime soil, on the Western Run in Baltimore county, about two miles north west of the 14th mile stone of the Baltimore and York turnpike road, and at the same distance from the depot of the Baltimore and Susquehanna rail road, at Cockey's tavern, in a rich, highly cultivated and healthy tract of country. This farm contains from 260 to 270 acres, having a full proportion in wood, much of which is building timber, peculiarly valuable in that neighborhood; is in the best state of cultivation; a considerable part in productive timothy meadow, and the residue of the arable land, not in grain, is well set in clover, the whole under good fencing, laid off into convenient fields, each of which is well watered. The farm has a large quarry of excellent building stone. There are on the premises an apple orchard of select fruit trees, which seldom fail to bear abundantly; a valuable mill seat on the Western Run, with a race already dug. There is no location in the country more favorable for a grist mill, having the advantage of a rich and thickly settled neighborhood, and a good public road leading thence to the turnpike road. Buildings substantial and convenient, being a STONE DWELLING, and kitchen of two stories; a large stone Switzer barn, with cedar roof and extensive stabling below; large hay house and stable for cattle; stone milk house near the dwelling, with a spring of fine never failing water, with other out-houses. On the country road near the mill seat a good house and shop for a mechanic, under rent to a good tenant. It is well known the lands on the Western

Run are in every respect equal, if not superior to any in the county. Adjoining or near are the lands of Col. N. Bosley, Daniel Bosley, Thos. Matthews and others. The water power, with about 20 acres of land, is so situated that they may be detached and sold separately, without injury to the rest of the farm for agricultural purposes. Terms of sale will be liberal. Apply to

NATHANIEL CHILDS, on the premises, or to WILLIAM J. WARD, oc 23 tf Fayette, near Calvert st. Baltimore.

CHILDS' PATENT SHAVING OR SHARPENING POWDERS.

As tranquility of mind is essential to the convalescence of the body, so will these powders prove from the usefulness and relief they afford to those who have to shave daily, and particularly dyspeptic invalids, whose enfeebled nerves are rendered more feeble by the least agitation.— Their use I strongly urge, and warrant their effect in producing feelings as agreeable and as soothing as an anodyne; and to those in health, instead of an irksome undertaking, the operation becomes a pleasurable pastime. I deem it my duty to recommend to the public this invaluable article, which may be had at the store of the inventor, No. 88 South Street, Bowly's Wharf:—James Gould, No. 136, Market Street:—or at Canfield & Brother's, South-East corner of Baltimore and Charles sts. X Feb 19 41*

FRESH SUPPLY OF FIELD AND GARDEN SEEDS,

BY THOMAS DENNY, Ellicott near Pratt street, Baltimore, who has just received general supply of GARDEN SEEDS, the growth of 1838, part of which was raised by the first Seedsman of this country, and a part imported, all of which will be sold wholesale and retail, upon the best terms, such as GARDEN PEAS; Early and Late assorted Cabbage; Cauliflowers; Radish; Lettuce; Cucumber; Parsnip; Carrot; Onion; Rutabaga Turnip; Parsnip seed of all kinds, Garden Beets assorted; French Sugar Beet; Mangel Wurtzell, &c. &c. Also Field SEEDS, such as Early Sugar, Early White, Sioux, Chin or Tree Corn; Dutton, Baden and Twin Corn; Red Clover; Luzerne and White Dutch Clover; Timothy; Orchard; Herds; Millet, Tall Meadow Oats; superior Weed Oats; Spring Wheat; Spring Rye; Spring Barley; Seed Buckwheat; blue and Kentucky Lawn Grass, &c. &c. Also GARDEN TOOLS, assorted sizes, and late improved patterns; Bird Seed of all kinds, Double Dahlias; Hyacinths, and Polyanthus, assorted, and selected for beauty and richness of colours, together with choice Flower Seed, assorted; Mulberry Trees; Fruit and Ornamental Trees; Silk worm Eggs; &c.; Agricultural Books; Silk Manuals; &c. Rohan Potatoes—Early Seedling do. &c. All orders by mail or otherwise will meet with early attention and dispatch, on the best terms for cash. ja29 8t

SILK AGENCY,

Corner of E. and 7th streets, Washington City, D. C. The subscriber having commenced an Agency for the purchase and sale of SILK MULBERRY TREES, and all articles connected with the growing of Silk, offers for sale the following varieties of Mulberry Trees at Baltimore prices, viz. Multicaulis, Alpine, Broussa, White Italian and Canton; also Mammoth White Silk Worm's Eggs, warranted to be of superior quality. All the recent publications on silk growing for sale, and subscriptions received for the various periodicals devoted to that subject. no 20 J. F. CALLAN.

CHINESE MULBERRY TREES.

American Silk Agency, No. 95, Walnut st. Philadelphia. The subscriber having opened a permanent Agency for the purchase and sale of all articles connected with the culture and manufacture of Silk in the United States, offers for sale all the different varieties of MULBERRY TREES, suitable for raising the SILK WORM; viz: Morus Multicaulis Alpinese, Brussa Multicaulis Seedlings, Morus Expansa, Multicaulis Cuttings, Improved Italian Trees, &c. Also, Cuttings from Norton's Virginia Seedlings, and Cunningham's Prince Edward GRAPE VINES. These vines produce an abundant crop of fruit, warranted not to rot or mildew and are fine for the table, and capable of yielding the finest wines. S. C. CLEVELAND, Agent.

THE AMERICAN FARMER.

The proprietors of this paper have a few complete sets of this work on hand, which they will dispose of at the reduced price of \$50 a set. oct. 16 3

THE FARMER & GARDENER

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, E. P. ROBERTS AND SAMUEL SANDS—EDITED BY E. P. ROBERTS.

No. 44.

BALTIMORE, MD. FEB. 26, 1839.

Vol. V.

THIS publication is the successor of the late **AMERICAN FARMER** and is published at the office, at the N. W. corner of Baltimore and North streets, over the Patriot office, at two DOLLARS AND FIFTY CENTS per annum, if paid within one month from the time of subscribing, or \$3 if after that time. All letters to be post paid.

BALTIMORE: TUESDAY, FEB. 26, 1839.

We are happy to learn, that the committee on manufactures in the legislature of this State, have reported a bill granting a bounty of 10 cents per pound on cocoons, and \$1 per pound on reeled silk raised in the State. While we express our pleasure at the report of this bill, we must be permitted to say, that we consider the bounty on cocoons too low. The law of Georgia grants 50 cents per pound on cocoons.

SILK SOCIETY IN DELAWARE.

It is a pleasant duty to us to record the following notice of the organization of a State Silk Society in this gallant little State, as from the names of its officers we have the best guarantee that we could desire for its onward march. Among them we perceive many of the most distinguished gentlemen in Delaware; men whose moral worth and high standing give them an influence which cannot fail to ensure to the enterprise, in which they have so laudably engaged, entire success. Among such men as comprise the officers of this institution, all of whom are distinguished for their virtues, patriotism and talents, the task would be an invidious one of singling any out, and, therefore, without intending or desiring to do so, we may be permitted to remark, that it gives us unfeigned pleasure to behold at its head, one who, while in the councils of the nation, representing the smallest State in the Union, imparted to her, by the force of his talents, a weight as ponderous as the largest in the sisterhood.

A state convention relative to the growth of silk, was held in Dover, (Delaware,) on Wednesday, the 6th instant, whereof Dr. James W. Thompson was president. Resolutions were adopted, expressing confidence that silk can be profitably made in that state; whereupon a state society was formed, and a constitution adopted.

President—Hon. JOHN M. CLAYTON.

Vice Presidents—Dr. James W. Thompson, of New Castle county, Martin W. Bates, of Kent county, and Colonel William D. Waples, of Sussex county.

Treasurer—David Hazzard, Esq.

Corresponding Secretary—Dr. Henry Gibbons.
Recording Secretary—Dr. James S. Naudain.

Executive Committee—For New Castle county—Dr. James W. Thompson, Philip Reybold, Merrit Canby, Dr. Cuthbert S. Green, Sohn Sutton, jr. William H. Jones.

For Kent County—Martain W. Bates, John M. Darby, Ayres Stockley, Henry Todd, Robert H. Moore, Daniel Cowgill.

For Sussex County—Col. William D. Waples, Aaron Marshall, jr. John H. Baker, Nehemiah Redden, Caleb S. Layton, Dr. Henry F. Hall.

[From the United States Gazette.]

MORUS MULTICAULIS.

Letters received by the last packet from France, state that the sales of trees and cuttings of the *Morus Multicaulis* has ceased, in consequence of the greatly increasing orders from this country. The nurserymen there, had not been prepared for such unusual and unexpected demands; and, after increasing their prices 200 and 300 per cent. they finally quit selling their plants, at any price, in order to cut them up, to propagate an additional supply for next season.

It has been frequently stated in the papers that the *Morus Multicaulis* is too tender to withstand the severity of the winters in Pennsylvania, and that the Alpine, and Moretti, or *Morus Macrophylla*, were better adapted to this climate. It is believed that this opinion is erroneous, as there are now growing, in the Bartram Botanic Garden, three miles S. W. from Philadelphia, several trees of the two last varieties, which were received from France ten years since (soon after the *Morus Multicaulis* had been procured from Manilla.) The plants were slightly protected from the cold of the first winter, since which they have never been sheltered, nor suffered the least injury from the frost. The largest tree of the *Multicaulis* is 18 feet high, and ten inches in circumference. The leaves are larger than those of the *Macrophylla*, and of a smoother and finer texture;—they are preferred by the silk worms. Both varieties appear to be quite as hardy as the white mulberry (*Morus alba*.)

[From the Magazine of Horticulture.]

ON THE CULTIVATION OF THE CAULIFLOWER.

Your Magazine having by this time, an extensive circulation through the different states in the Union, it is not (in my humble opinion) unreasonable to suppose, that, through the perusal of its pages, by your numerous subscribers, a greater amount of practical knowledge has been obtained of the most approved methods of cultivating and propagating rare and choice flowering plants, than could, in any other way, have been so easily acquired.

I beg leave, therefore, to depart from the beaten

track, and offer you a few brief and practical remarks on the propagation and cultivation of the cauliflower, which is not only a very curious flower to examine, but is, when properly cooked one of the most delicious and delicate vegetables of the whole *brassica* or cabbage tribe. The flower alone is the part for which the plant is cultivated; the flower buds form a close round head, and very white, and a good flower will measure from six to ten inches in diameter; but if the flower is cut after it has begun to expand or open, it will, of course, appear larger than what I have stated; but it should be known, that it is by no means so valuable as it was in its firm, close state.

Cauliflowers are raised from seed, sown as early in the spring, on a warm southern aspect, as the frost leaves the ground; again, for the autumn crop, the first week in June, on a northern aspect. Half an ounce of seed, if good, will be sufficient to sow a bed four feet wide, by ten or twelve in length. The soil for the seed bed ought to be light and in good heart, but not too rich with manure; but those who have farms and glass lights could forward the plants at least six weeks, by making a slight hot-bed, and covering the manure about six inches with good fresh mellow loam. About the middle of March sow the seed, being mindful to secure the frame all around with dry litter, laying boards on the top of it to keep out the rain or snow, as well as to secure the soil in the frame from the frost, which might, otherwise, penetrate through and freeze it. Supposing that the seed is sown in a frame, and it having been secured as before advised, the plants will soon make their appearance, when plenty of air must be given, every day when the weather will admit of it, by propping up the glass, in order to make them strong and healthy. The plants by the middle of April will be ready to transplant, which might be done in the same frame they were sown in, if there is not another at hand, by first taking up the plants, carefully, with a trowel, and carrying them to some warm sheltered spot, until you get the frame ready. All that would be necessary to be done, is to remove the soil from the bed, and then to fork it well over, adding a little more manure if the bed is cold; but if the bed has any heat in it, no more will be requisite, as a slight warmth is all that is wanted. After the manure has been nicely levelled with the fork, and beat down solid, replace the soil and rake it smooth; then provide yourself with a board, the width of the frame, placing it on the soil to stand on, in order to pick out the plants about four inches apart; select the strongest first, and so go on, until all of them are transplanted.

As soon as the plants begin to grow, give an abundance of air, every fine day, and water when the ground appears dry. Every warm day, the glass should be taken entirely off the frame. If the weather is fine about the 20th of May, the plants may be put out in the ground, which should

be prepared for their reception, to fruit or head. A mellow, loamy soil should be prepared, that has had a bountiful supply of well decomposed or rotten manure; holes may be opened about two and a half feet apart, from centre to centre, and about twelve in diameter, taking out six or eight inches of the soil, and filling it with the kind of manure spoken of, and mixing the under soil and the manure well together. By taking the plants carefully from the bed, with a hollow trowel, they will receive but a trifling check, if any, when transplanted.

The plants must now be kept in a growing state by giving them plenty of manure water (which might be easily obtained in any farmer's yard) three or four times a week, if there should be a continuance of hot dry weather. This is where the whole secret lies, in the growing of the cauliflower, i. e., to keep the plants growing from the time of planting, until you perceive the flower has attained a sufficient size for cutting.

If the seed is sown in the open ground in June, a similar mode of culture should be followed in the transplanting, and final planting, as recommended above. These plants will not begin to show their heads or blossoms until late in the autumn; but if any of them should not complete their growth, they will do nearly as well as in the open ground, if placed in a good cellar where there is a good portion of light. Remove them carefully, and place the roots in good earth, and the operation is completed.

Plants for producing an early crop in the spring, should be protected in cold frames during the winter. The seed should be sown the latter part of July, or the beginning of August. The plants may be set out in No. 2 pots; and upon the approach of cold weather, they should be set in a frame and protected from frost. Take advantage of every warm day in January and February, to open the frame, and in the month of March they may be removed to a declining hot-bed, where they should be turned out of the pots into the soil. Here they may remain until the middle or latter part of April when they may be removed to a warm spot in the open ground, as before advised. If a hollow trowel is used, and the plants are taken up with a good ball of earth, they will not suffer in transplanting. Hoe and water, if the weather should be dry, and by the end of May, or early in June, fine heads of flowers may be obtained, thus keeping up a succession the year round. In large private establishments, or where they are raised for the market, they may be grown in deep frames, where they will be fit for cutting the latter part of April. At Mr. Cushing's cauliflowers are cut for the table as early as March, and the supply kept up the whole season by successive sowings, as here recommended. A good mellow soil, and plenty of water, during our hot summers, are the only requisites to ensure fine heads of flowers.

In another article, I shall give the cultivation of that fine vegetable, the Brussels sprouts.

Yours,
J. W. RUSSELL.
Mount Auburn, Cambridge, Jan. 1839.

RAISING ROOTS.

The cultivation of roots is becoming a very important branch of husbandry, among the farmers of the New England States. It is now rendered

certain that with good cultivation 5 or 600 bushels of Ruta Baga can be raised to the acre at a cost not exceeding four or five cents per bushel. The value of this crop in supplying neat stock, sheep, and swine with food through our long winters is just beginning to be appreciated. Its value is differently estimated by persons who have used it. Some think that forty bushels are equal to a ton of hay—others consider them as good as oats pound for pound. A gentleman who made some very accurate experiments in feeding them to his team of four oxen found it to be full equal to half its weight in corn meal. There is one fact in which all agree, that is; cattle that are fed, plentifully on roots during the winter, are not so liable to have those diseases which are generally prevalent among cattle in the spring.

The only opportunity we ever had, of witnessing the advantages of feeding roots was with a cow, which resulted in a firm conviction of their utility. Instead of becoming poor in the spring, she left the barn in excellent condition—gave a much larger mass of milk through the winter than usual; and instead of going dry six or eight weeks before calving as she always had done before, she gave milk to the very day she calved, and during the next summer she gave nearly a third more than she had ever given before in the same time on equally as good keeping.—*Maine Farmer.*

S.

BLACK SEA WHEAT.

A friend in Penobscot County, requested us to procure him some wheat that would not rust. Knowing that Mr. Jewett of Windsor, raised a valuable kind, we wrote to him respecting it, and received the following reply, which we think contains valuable information and ought to be made public. He will therefore, excuse us for publishing it.

If he will be so kind as to inform us, or rather the farmers through our paper, how he prepares his seed for sowing—quantity to the acre—kind and quantity of manure—general quality of the soil on which it is sown, and quantity produced to the acre, &c. he will perform a good act.

Windsor, Feb. 1st, 1839.

MR. SEAVEY:—I received your lines yesterday respecting seed wheat. All I can say is, my wheat is the true Black Sea Wheat and when you see it growing you will know it from any other by observing about one sixteenth part of the heads being short and square as a square block with four or six rows on a head. The kernel is large and full. It generally makes from forty-seven, to fifty pounds of flour, whiter and better than any other kind I ever had. It has never been known to rust as yet; it has been sowed in almost all situations in this vicinity, side by side with other wheat, and the other wheat has been hardly worth reaping, but this was good and full, and not a particle of rust on it. I sold at Gardiner last year, what I could spare at \$3.00 per bushel. I shall sell this year at \$2.50.—*Maine Farmer.*

J. JEWETT.

Remedy for Sprains, Bruises &c.—As it frequently happens that severe swellings occur from bruises, sprains, &c., I take the liberty to send you a receipt which has, in various instances,

within my own sphere of observation, produced the most rapid and extraordinary relief. It was tried a few days ago, upon the foot of a gentleman who was suffering agony from a violent sprain, and afforded instantaneous relief. I have used it with great success in dispelling fistulous swellings upon horses. It has never, with me, failed to reduce the swelling unless pus had formed. Its simplicity has caused it to be rejected by some, but, as it can do no harm, and as the materials are at hand, it can at least be tried. It is a mixture of one pint of soft soap; a pint of good vinegar; a handful of common salt, and a table spoonful of powdered nitre; put them into a common white basin, and bathe the part affected. I have never used it where the skin is abraded, as most probably violent pain would ensue. If, upon trial, you deem it worthy of publication, I shall be pleased to see it in the pages of the widely circulated Cultivator.

T. F. NELSON.

Virginia, 1838.

Mulberry Trees and their Prices.—Some sales have recently been made in New York of foreign mulberry trees, which have surprized people. They have been sold at 15, 20 and 35 cents each tree, and some trees even less than either of these sums. We have taken some pains to enquire about these trees so that the facts might be known, and have now before us a specimen of them from New York. They were imported from France, were grown on a clay soil, and are small, stunted trees, averaging from one to two feet in height. There were about 25,000 of these trees sold, or rather forced off in the market, for the reasons, that they were wretched trees and were very badly sprouted. So much for the trees sold at auction in New York in the winter when nobody wishes to purchase. There is another fact, which leads people to think that the market is now to be glutted with trees. Fifty-five tons of trees have just arrived from France, comprising nearly all the trees that could be collected in the kingdom. They are tons measurement and not weight, and what is remarkable, a friend who inspected them in the ship, says two thirds out of the 100,000 are dead trees. They were packed in kiln-dried sand, and the large part of them are worthless and most of them are small. Nearly all the trees in Europe have been bought up for the American market, and what is more, there must be a scarcity there, or they never would import such small, miserable affairs. What we have stated above is authentic, and any one of our friends can see specimens of these French trees now in our possession.—*Northampton Courier.*

A Good Week's Work.—Mr. John Kenworthy brought to our office this week, eighteen pounds of butter, of an excellent quality, which Mr. Kenworthy made by one cow. The cow is a modest American animal, with no great pretensions, but which, like most American females, is better than she looks, though she looks well enough for any body. Mr. Kenworthy's place is near the Friends' Asylum, Oxford township. So much for treating the cows well.—*U. S. Gaz.*

Never feed potatoes to stock without boiling or steaming them, as this increases their nutritive qualities.

From the Genesee Farmer.

PRODUCTION AND CONSUMPTION.

Considerable surprise has been manifested in various quarters, at the continued high prices of grain and other articles of food; and much ingenuity has been displayed in tracing the effect of prices to their probable causes. With some the cause is a failure of crops; others will have the high prices originated in monopoly and speculation; they have been charged upon the banks or the government; in short there is scarcely a cause capable of any effect in producing such a result, which have not been brought forward to account for present prices. While all these have had their weight in producing the effects we witness, we think the most important of the whole, the relation existing between production and consumption, has been comparatively overlooked.

Agriculture lies at the basis of all interests; the production of food being of paramount importance; but the relative prosperity of that interest, or rather the price of agricultural productions, is depending on the number or demand of the other classes of the community, such as the mechanic, commercial, or manufacturing interests. The price of provisions will usually, therefore correspond to the relative numbers employed in these grand divisions; the first, or the farmers, being the producers; the latter, or the several classes enumerated, being the consumers. If in any community all were producers, it is clear the demand would be only that of the individual producers. In a community if all were manufacturers or mechanics, all consumers and non-producers, the result may be easily imagined. If in this community, the producing class exceeded the others, provisions would be low, as the demand must of course be limited; if the consuming class preponderated the price of provisions must rise. Partial failures in the crop; fluctuations in the money market; and other causes may aid in influencing or in increasing the operation of this cause, but their effect can be but temporary, as they never exist for any length of time. On the contrary, inequality between the production and consumption, is, from the nature of the case, more permanent, as the business and habits of large masses of men are changed slowly and at long intervals.

The prices of agricultural produce which have existed for a year or two in this country, and which appear to have excited so much surprise, we consider the natural result of a disparity between the production and the consumption, the latter exceeding the former. The producers of food, or in other words the farmers, have not increased in a ratio corresponding to that of the consumers, or the other classes in our country, have increased in a greater proportion than that of the farmers, and taken with the other non-producers of food, and no other result than what we witness could have been anticipated. A large proportion of the sons of farmers have chosen the other kinds of business or professions named, to that of their parents; manufactures, commerce, mechanics, the professions, and in too many instances, living by 'hook or by crook,' have been preferred to the honorable occupation of the farmer, and as a necessary consequence, the producers find themselves more and more masters of the field, and able to fix their own prices.

Farmers can never rely on themselves for sup-

port; they may from their farms produce what is absolutely necessary to eat, drink and wear, but, for many of the articles that the conventional codes of society have rendered necessary to appearance and comfort, all the principal luxuries of life they must depend on others; and on those consumers they must rely for the sale of their surplus produce. It is the real interest of the farmer, therefore, to be satisfied with good profits on his labor, and not by charging exorbitant rates, drive so great a proportion of the other classes from their pursuits, and compel them to become farmers, as to materially change the ratio now existing between producer and consumer. Consumers are the source of prosperity to the farmer; they are the life of agriculture. In the demand consequent on general prosperity, agriculture always expands and flourishes; without such demand it is, and must be, contracted, its operations inactive, and its returns profitless. Of all classes, farmers are the most truly independent; but perfect independence is truly a Utopian dream. Dependence is a primary condition or element of society, and the last could not exist without the first. The dependence between the producer and the consumer is mutual so far as profit is concerned; and it is idle for the latter to blame the former for prices when the remedy that alone can correct the inequality when it exists, is in his own hands; he too must become a producer. If the population engaged in commerce, in manufacturers, mechanics, or the professions, could not live without the farmer, we too should remember that without their aid our business would be of little value in the production of wealth, and that their mouths are as essential an item in agricultural prosperity, as fields covered with crops, or barns bursting with plenty.

Stretches in Sheep.—The editor of the Maine Farmer gives the opinion of a very intelligent farmer, as to this disorder, that it is caused by costiveness, which is produced by a change from green to dry food when the sheep come to the barn; and that green food, such as potatoes, turnips, &c. will relieve it. He thinks such diet will entirely prevent it.

Yankee Farmer.

Silk.—The Savannah Georgian publishes copious extracts from a Journal kept by a Mr. Bolzius, in Effingham, Ga., as far back as 1736, by which it appears that Gov. Oglethorpe then made very strenuous efforts to encourage the cultivation of the Mulberry, and that a considerable quantity of Silk was actually raised there, at that early period. The following is an extract from the Journal.

"The Mulberry trees commence putting forth their tender leaves. Our people are now vigorously occupied in making due preparation for the production of silk. They become more and more stimulated to attend to this business from the increasing dimensions of the trees, and a more ample supply of leaves. The soil and climate are well adapted for the purpose, and I am only surprised that so few in this country attend to the useful concern.

"Mrs. Bolzius, with the assistance of a female, had, during one season made upwards of 100 pounds of silk in the balls, whilst she acknowledg-

ed to have experienced the employment agreeable, rather than irksome. In the course of five weeks the whole work is completed into the process of spinning."

Apples for Hogs. As the apples usually given to hogs are very liable to decay, it is much better to put them under cover in a cold place, where they will freeze and remain frozen, than to put them in the cellar where they will be liable to rot. —Frozen apples, when warmed, are probably as good for hogs as tho' they were sound. We heard a farmer, who wintered his hogs in good condition mostly on apples, say that frozen apples, warmed, were preferred by his hogs to sound ones, when both kinds were given them. We think that apples and apple pumace, as the principal ingredients in the food of hogs, is the cheapest food that can be raised for them; this food should be cooked, and bran meal, &c. mixed with it.

[Genesee Far.

Josiah Stevens, Esq. New Hampshire Secretary of State, raised last season on one acre of light soil upon his farm in Newport, very near thirty bushels of the common bearded wheat. He sowed upon this acre four bushels of dry slacked lime made at Wethersfield, Vt. Mr. Stevens is of opinion that his crop of wheat was doubled in consequence of the application of the lime. One bushel and a half of seed was sowed.

Cure for the Sore Tongue in Horses.—Take a bunch of rags, and wash the mouth of the horse, effectually, with warm soap-suds, made very strong; after which anoint the tongue with spirits of turpentine, with a feather. A few applications of the suds and turpentine will effect a cure.

CURE FOR THE SWINEA.

Having a horse affected with this disease, and having in vain tried rowelling, bleeding, &c., we were advised to cut his shoulder to the bone; but it seemed barbarous, and we did not do it. The horse having been lame and unfit for service about two months, the old man who proposed the above remedy, came and proposed to perform the operation himself, which he did, by cutting a gash with a sharp knife, of about two inches, midway from the withers to the point of the shoulder, to the bone. He then rubbed spirits of turpentine in the wound, and let the horse loose. He soon got well, and so remained while we kept him.

MOUNTAIN FARMER.

Dec. 25, 1838.

P. S. I have a field infested with black locust sprouts, which I have not been able to destroy. It would oblige me, if you, or some of your readers, who know how they may be got rid of, would inform me through the medium of your paper.

M. F.

It is said that to strip the bark from the top branches down to the roots, when the tree is in full bloom, will effectually destroy the locust sprout. If any of our readers know an easier or better remedy we should be glad to hear from them.—*Edt. Ten. Far.*

MAPLE SUGAR.

The following directions for obtaining sap, and sugar from the rock maple, were handed us by a friend. We do not expect to teach our New Hampshire and Vermont friends how to tap the maple, still it is possible they may derive some new ideas, as all do not adopt the same course in manufacturing the sugar. This mode of tapping with an auger has been practised for many years, but we were not before aware that the auger should not separate more than half an inch into the sap wood. It is possible in this age of honeyed words and sugar-mania that some may wish to be sweetened with the sap of the rock maple tree that may be reared with their own hands by the road side. This is one of the cleanest and most beautiful of our forest trees, and may be propagated and transplanted with as much ease and safety as any tree which we have cultivated.—*Edt. Boston Cultivator.*

It is commonly in February or the first days of the month of March that the work of making maple sugar is begun the time when the sap begins to rise though the earth may be covered with snow, and it flows nearly two months before the tree begins to show any vegetation. Having chosen a central place in respect to the trees that are to furnish the sap, a shed is raised, called a sugar camp.—Its object is to shelter from the weather the cauldrons in which the operation is carried on, and the persons who direct it. One or more augers of about three quarters of an inch diameter, some small spout to receive the sap, tubes of alder or sumac of eight or ten inches, open on two thirds their length, and proportioned to the size of the augers, buckets to empty the spouts and carry the sap to the camp, cauldrons of the content of fifteen or sixteen gallons, moulds proper to receive the syrup when thickened to the point suitable to be transformed into loaf, finally axes to cut and prepare the combustibles, are the principal utensils necessary to this work.

The trees are perforated obliquely from below, upward at eighteen or twenty inches from the ground, with two or three parallel holes at four or five inches distance one from the other. It is necessary to take care that the auger does not penetrate more than a half inch into the wood, observation having proved that there is a greater flow of sap at this depth than at greater or less. It is recommended also, and it is the custom to pierce them in the part of the trunk facing south.—This practice, though well known to be preferable, is not always followed.

The spouts, of the content of two or three gallons, are most commonly made, in the northern States, of white pine, white or black ash, or maple. The chesnut, the oak, and especially the black walnut and butternut must not be employed for this use, because the sap is easily charged with the coloring part, and even with a degree of bitterness with which these woods are impregnated. A spout is placed on the ground at the foot of each tree to receive the sap that flows by the two tubes introduced into the holes made with the auger. It is collected daily and carried to the camp, where it is deposited temporarily in casks, from which it is drawn to fill the cauldrons. It must always be boiled in course of the two or three first days after it is drawn from the

tree, being susceptible of readily entering into fermentation, especially if the temperature is moderate. They proceed to the evaporation by a brisk fire, taking care to skim it during the boiling, and they add to the richness of the liquor, by the successive addition of a new quantity of sap, until that finally acquiring a syrupy consistence, it is passed after cooling, through a covering or any other woollen stuff, to separate the impurities with which it may be changed.

Some persons recommend not to heat it to the last degree of boiling till twelve hours; others, on the contrary, think it may be done at once. In either case, they pour the syrupy liquor into a cauldron, which is to be but three quarters filled, and by a brisk and well kept up fire they bring it readily to the degree of consistence required to be poured into the moulds destined to receive it. It is known to have arrived at this period when taking some drops between the fingers, they perceive some small grains. If in this last boiling the liquor boils over, a small piece of lard or butter is thrown into the cauldron, which makes it immediately subside. When the molasses has flowed from the moulds, this sugar is no more deliquescent than the brown sugar of the colonies.

The process above described is exactly the same, whether the sap is drawn from the sugar maple or the red or white maple: but these two last species must furnish double the sap to make the same quantity of sugar.

Different circumstances contribute to render the crop of sugar more or less abundant. Thus a very cold and dry winter is more productive than when the season has been very variable and very moist. It has been observed also that when during the night it has frozen very hard that on the following day the air is very dry and clear, the sap flows in great abundance, and that then a tree gives two to three gallons in twenty-four hours. It is estimated that three persons may tend two hundred and fifty trees, which give one thousand pounds of sugar, or about four pounds to a tree, which, however, does not appear to be always the case with those engaged in the business; for many farmers on the Ohio assure us that they do not obtain but about two pounds.

Trees which grow in low and moist places give more sap, but less charged with saccharine principle than those situated on hills and slopes. They draw proportionably more from those situated in the midst of fields or the length of inclosures from habitations. It is remarked also that when the districts where they annually make sugar are deprived of other kinds of trees, they obtain more favorable results even from unthrifty sugar maples.

Fine Mutton. We saw a few mornings since in the market of Mr. Samuel Pine, three fore quarters of mutton, which would have made an alderman's mouth water. Two of them were of a four year old sheep, and the other of a lamb, or a one year old. On the ribs the fat was at least two inches thick. The two saddles had been purchased for the New-York market, at 18d per pound and came to \$22 50. The sheep were fatted by Col. George Vanderbilt, of this town.

Poughkeepsie Tel.

How can I make the most money from my land? is a question which every farmer should put to himself. The following remarks will aid him in answer.

A great change has been made in cultivating the soil. Twenty or thirty years ago we raised wheat, wheat, wheat—then we raised rye, rye, and a few oats, peas and buckwheat; and then, in a great many places, we made fuel of our fences, gave our lands to the commons, and removed to the West, where again we could raise wheat, and then rye, and end with oats and buckwheat.

Such has been our system of agriculture, and such the rotation of crops. But a change has come over the land. We are learning to recover soils, and raise a great variety of crops.

Great attention is now paid to the culture of roots. The potatoe, ruta бага, mangel wurtzel, carrot and parsnip, are piercing the earth, where once stood a few half-starved spears of rye, or white beans.

By this change in agriculture, the land is made to produce ten times its former yield; and the cultivation of roots is now considered as one of the tests of good farming. Roots prepare the land finely for other crops. They possess the greatest value as an article for food. They enable the farmer to keep ten times the stock that grass would support; and he who neglects roots now, is not a good farmer.

The following will show how much food can be raised from one acre by cultivating roots:

The Messrs. Bullocks, near Albany, from four acres have taken 4000 bushels of ruta бага. A gentleman in New Jersey, from two acres, had 2000 bushels.

Mr. Bement, of Albany, well known for his patriotic efforts in the cause of agriculture, has produced roots weighing 24½ pounds. Edward Miller, of Albany, has raised at the rate of 1320 bushels per acre. The agent of the Land Company, at Bath, Steuben county, raised at the rate of 1320 bushels per acre. R. Gorden, in the Farmer and Mechanic, states his crop at 1510 on an acre.

Of the mangel-wurtzel, crops of from 1000 to 2000 bushels per acre have been repeatedly raised. It is probable that of this root more tons have been produced on an acre, than of any other. The carrot does not fall much behind the field beet in productiveness. Mr. Beach, of Marcellus, has raised at the rate of 2300 bushels to the acre; and Edward Miller, of Albany county, 1680 bushels. In what other way could we have obtained so much animal food?

It should be remembered that what has been done in cultivating the earth, may be done again; and that the productive powers of the soil are not diminished; and more than all, that with 200 bushels potatoes, 500 of ruta бага, or carrot, and the same of mangel-wurtzel to the acre, and suitable soils, these amounts will most surely be exceeded; root crops are far more profitable than any other; corn or grain, or hay crops.

"What should be the reason," said a respectable farmer, in conversation the other day with another farmer, "that with a less quantity of land under cultivation, you can keep so much more stock in proportion than I am able to do, and at the same time, produce such quantities of grain."

"My roots do it," was the reply. "I fattened my

pork on boiled apples and potatoes, finishing with corn or ground barley; I fattened my beef on turnips; I feed my horses with turnips or carrots, unless put to hard labor during the winter, when I allow them oats; and I separate early in the season my lambs from the rest of the flock, and feed them with turnips. By adopting this course I rarely lose an animal, and the expense of keeping my whole stock is considerably lessened."

Now will not every man who reads this, consider the subject? Try the experiment. He who suspects all changes must abide old evils. Manufactures are improving, education is progressing, and the world is on the advance. If the farmers do not wake up, they will be trodden on and crushed by this march of improvement. The farmer's profession, in its nature, is the most noble and independent of any; let it be so in practice.—*Common School Almanac.*

BEACH-HILL, JACKSON CO., TEN. }
December 10, 1838. }

DEAR SIR.—I last spring procured as much of the Baden corn from the original grower, as would plant four acres of ground. I planted the corn in a piece of rolling ground that had been in constant cultivation twenty two years, then lay idle in pasturage three or four years to fill up the small washed places, and reclaim it from its exhausted state.—Early in the spring I broke up the ground with a cast iron mould board plough.

Before planting, harrowed the ground each way with a curved tooth harrow; checked it off five feet distance each way; dropped the corn and covered the grains with a double handful of rotted stable manure; then harrowed the ground again. After the corn came up, harrowed the ground twice over with the curve five tooth harrow; next working lapped the earth to the corn with a two horse plough; two more harrowings finished the cultivation. The corn grew luxuriantly; has a large stalk, with from three to eight ears on the stalk; the blade over the size of common corn, and continues green later in the season. I carefully gathered and measured the corn made off this four acres, and from the tub measured sixty four barrels, which is eighty bushels per acre. Had none been destroyed by hogs and horses, I believe I would have made eighty five bushels per acre. I believe it a valuable corn if planted in good ground and well cultivated.

I dropped three grains and left but two stalks in the hill.

JAS. W. SMITH.

From the New England Farmer.

SOWING CORN BROADCAST, SUMMER SOILING, &c.

MR. EDITOR—By *summer soiling* European writers mean the cutting of green food for cattle and feeding it out without curing. And European writers frequently enlarge upon the advantages of this practice.

Some of the advantages of *summer soiling* are said to be the following:—The same ground will furnish food for cattle, in the proportion of from 3 to 5 by *summer soiling*, where but one would be kept without it.

The cattle kept in well shaded yards, or well ventilated stables will be guarded from the biting flies, and the scorching sun, and will feed in com-

parative comfort, and of course will thrive on a smaller amount of food. By *summer soiling* also the quantity of manure may be used at any time and place which is desired. The keeper will find however, that it is somewhat more laborious to cut green food, and to place it in the mangers before the cattle, than it is to turn the cattle into the field and let them select and trample down for themselves. But in this country there seemed to be a difficulty in finding a *succession* of green crops for *summer soiling* through the season, particularly in the latter part of summer. To obviate this difficulty a gentleman of New London, Conn. sowed southern long kernelled, or horse tooth corn.

This corn came on after the first crops of grass were gone, and it came on too at a time when pastures were frequently dead and dried up. I have now been a number of years in the practice of sowing horse tooth corn, broadcast, for *summer soiling*, and the following experiment made two years ago, was attended with results very similar to the common results of experiments made in other years:—

EXPERIMENT.—On the 15th June 1836, about 16 square rods of ground which had been well manured, and well ploughed, were sown broadcast with horse tooth corn, at the rate of four bushels of seed to the acre. The seed was then lightly ploughed in with a small horse plough, after which the ground was harrowed and rolled.

On the 16th of August following we began to cut up the above described ground. The crop which grew from the 16 rods of ground before mentioned afforded forage for a horse from the 19th of August to the 8th of October, and also afforded the principal part of the food for a cow from the 5th September to the 8th of October. Making 50 days keeping for the horse and 33 days for the cow.

On the 5th of September when this corn was from 5 to 8 feet high, but had not eared or tasseled out, the produce of one square rod was cut up, and while green it weighed 375 lbs. This was at the rate 30 tons to the acre. This 375 lbs. which was cut from one square rod of ground was dried and on the 27th October, 1836, it weighed 86½ lbs. which is at the rate of 13,800 lbs. or 6 9-10 tons to the acre.

An acre of horse tooth corn, sowed in this way on good ground, would probably afford green forage for 30 cows a month, or for 8 horses the same length of time. And we think such a crop of corn stalks, is far superior to any crop of guinea grass, or cow cabbage, which we could reasonably expect to grow in this country. It is proper to remark here however, that in order to make the horse active and strong for business, a little provender is very useful.

While the horse was eating the corn stalks as before mentioned, he was allowed two quarts of shelled corn per day, and with this allowance he was more active and strong for business than when he had his two quarts of shelled corn, and as much good dry hay as he would eat. I may add, that though cows eat the green corn stalks voraciously for the first two or three days, if kept wholly on the green stalks they are apt to get cloyed, and afterwards not to eat as well. The stalks are not easily cured into good dry fodder.

The advantage of sowing the horse tooth corn, instead of some of the smaller sorts, are, the horse tooth corn being a taller kind makes a much greater amount of fodder.

It is a later kind, and therefore keeps green, and in a fit condition to be foddered out much longer, than the earlier sorts.

There is considerable difference in the sweetness of the stalks of different kinds of corn. And it might be worth the attention of Agricultural philosophers to make experiments to decide, not only which kind of corn-stalks yields the greatest number of pounds to the acre, but also which yields the greatest amount of nourishment to the acre.

For those who are apt to be short for *summer pasture*, particularly in August and September, will not the cultivation of a patch of horse tooth corn, sown broadcast, be found to be a matter of considerable practical importance?

Yours, respectfully,

ASA M. HOLT.

East Haddam, 15th August, 1838.

From the Farmer's Cabinet.

LIME.

MR. EDITOR—Your Cabinet, which is even now I believe the best publication on farming in this country, might be rendered more generally useful, I am sure, if your correspondents (who are numerous and able) would always state the grounds on which they form their opinions. Advice, unsupported by example, is seldom followed; nor is the fact that the persons who give it, most frequently use fictitious names, any incentive to its adoption, especially as the statements and conclusions made by them, however true, appear ridiculous and absurd. If your contributors would all substantiate their statements (by a relation) as I have intimated before, of the facts and experiments on which they are founded, and give too their names and residences, so that people may know on whom they depend, a very great stumbling block to the usefulness of your paper would be removed.

These reflections were produced by the singular circumstance, that although the Farmers' Cabinet abounds with testimony in favor of using lime, yet in this vicinity there are very few indeed who have been prevailed upon by it to give this invaluable manure a trial.

Now, Mr. Editor, if you think the following extract from my Journal (free at least from the above objection) will have any tendency to arouse the people of this section of country to their own interest, you are requested to give it a place in your periodical.

In the spring of 1835, I planted a field containing 25 acres of land, in corn; this field was a light and sandy soil, and had been in corn, oats, and pasture, without any admixture of clover, or manure, successively for a number of years; four hundred and seventy-five bushels of corn was received from this field this season, which was considered an uncommon large crop; the following spring this field was sown in oats, which at harvest was in some places scarcely worth cutting; the following fall it was sown in wheat, and in the spring following I sowed it in clover; the result of the wheat crop was, that I did not receive as much as was sown, and thinking the clover not worth keeping for the scythe, it was pastured until fall.

Profiting by former experience, I now determined to apply lime to this field; accordingly in

the spring (1838) I had it well ploughed, and 800 bushels of stone lime carefully spread upon twenty acres of the same. It was then harrowed well until in good order, after which it was struck out lightly four feet square for planting corn, which was done from the first to the fifth of May. (My reasons for adopting the above method was, that the land being poor, and having, the fall previous to liming, been manured, I thought, by flushing it in the spring, and spreading the lime on top, and harrowing well, would be the best plan to produce a good crop of corn, as well as to improve the land speedily; and I would observe that the corn was not cultivated so much as I wished, owing to a storm which knocked it about so as to render it impossible to continue cultivating it.) I was careful in leaving but two stalks in each hill.—The corn on the twenty acres which had been limed, suffered but little, if any, from the severe drought which took place this season; but the corn on the five acres having no lime on, suffered very much. The corn was cut up and shocked in the month of September, and husked out and measured in November. The corn was very dry and good. The result of this crop was 743 bushels from the twenty acres which were limed, manured, &c. and 80 bushels from the five acres having no lime on, making in the whole, 823 bushels of corn. It is the conviction of many farmers, that the corn crops this season would have been much larger, had not the drought taken place.

Let us now contrast this last crop of corn with the former one, and show the difference as to the land which was limed, manured, &c., and the land which was not, as the soil of this field was alike in quality previous to the above improvement.

	bus.
1835. Produce of 20 acres, 19 bushels per acre,	380
1838. Produce of 20 acres, 37 bushels per acre,	743
	363
Or, produce of the whole 25 acres in 1835,	475
1838. Do. of 20 acres, and 16 bushels per acre on 5 acres not limed, 80 bushels,	803
	328

Showing a difference between the former and the last crop, from 20 acres, of 363 bushels; and a difference between the former crop from the whole field, and the last crop, of 328 bushels.

It will appear then, Mr. Editor, that I have received this season 363 bushels of corn more from twenty acres of this field than the former crop, which was received from the same twenty acres. Or, taking in the five acres, which had no lime on, I received an overplus this season of 328 bushels, there being that number of bushels of corn from the field, more than at the former crop.

We will now make some estimate as to the cost of the lime, and I think it costs nothing to those who use it judiciously upon their land. We will take into this estimate the overplus corn from the twenty acres of land which was limed, the overplus of which is 363 bushels.

Dr. Land (twenty acres.)

1838. May 1. To amount paid for 800 bushels of lime, delivered, \$200 00

To spreading lime, &c.	8 00
For Interest on the money, 7 months,	7 00
	215 00

Supra, Cr.

By 363 bushels of corn, at 75 cts. \$272 25

By balance remaining on overplus corn, \$57 25

Thus it will appear, that after paying for the lime, and for carting and spreading it, and allowing the interest on the money paid, there still remains a balance from the overplus corn the sum of \$57.25, which will amply pay for all extra labor and expense that the raising of this overplus of corn may be charged with. If such then is the case, which is to me as clear as two and two make four, how is it that lime "costs too much," which appears to be the hobby horse upon which too many land holders in our neighborhood ride upon; and for which reason it is not used upon their lands. There are a few individuals here who have lately given it a trial, and they have been fully satisfied as to the powerful effects of this invaluable mineral upon their land; and I hope that the time is not far distant when many of our landholders in this neighborhood will give it a trial. We shall not then fear but what our section of country will advance too in the march of improvement.

R. M. BLACK.

Pencader Hun., N. Castle Co., Del., Dec. 25, 1838.

From the Cultivator.

CORN CROP.

Volney, Oswego co., Nov. 27, 1838.

Mr. Buel—Sir—I saw in your March number of the Cultivator, a premium offered on several articles of agriculture; I therefore send you a statement of one acre of corn raised by me this season, hoping that if I do not prove a successful competitor, the cause of agriculture may receive an additional witness in its behalf. The soil is a warm gravel; the corn was the twelve rowed yellow variety. About the 1st of May, I carried on and spread, all over the ground, seventeen loads of stable and barn-yard unfermented manure, ploughed before the manure dried; bushed and harrowed the ground well, being careful not to disturb the sod, which had lain to pasture four years; and on the 14th and 15th of May, planted the same, three feet and 3 inches apart each way. It was dressed with seven bushels of good unleached house ashes, mixed with one and a half bushels of plaster, when it made its appearance above ground. On the 10th June, went through between the rows both ways with cultivator; 18th June, cultivator both ways, then thinned to four stalks in each hill, and hoed out the weeds. On the 8d July, cultivator both ways, and commenced hoeing; put no more earth about the hills than we took from them, but carefully cleaned out all the weeds from the hills. The seed was prepared by rolling in tar water and plaster. The corn was cut up the 1st of September, at the ground, and shoked in small shocks, and on the 25th it was husked and housed.

The product is 110 bushels of first rate corn, and 6 bushels of second rate, making in all 116 bushels of corn, and four loads of stalks per acre.

EXPENSE OF CROP.

Ploughing 1 day and board,	\$2 00
Bushing and harrowing 1 day,	2 00
Planting 1½ days,	1 13
Hoeing 4 days,	3 00
Horse and hand with cultivator 2 days,	2 00
Cutting and shocking 2 days,	1 50
Husking and housing 8 days,	6 00
Ashes and plaster,	1 25
Interest on land at \$50 per acre,	3 50
Thrashing corn 3 days,	2 25
17 loads manure at 25 cents,	\$4 25
Carting and spreading,	4 25
	\$8 50
Deduct 2-3ds for succeeding crops,	5 66
	2 84

Total charges, \$27 47

VALUE OF CROP.

110 bushels sound corn, at 6s. 6d.	\$89 37½
6 do. soft corn, at 3s.	2 25
4 loads stalks, at 8s.	4 00
	\$95 62½
Deduct charges,	27 47

Nett profit, \$68 15½

WILLIAM INGALL.

I hereby certify that I am personally acquainted with the above named William Ingall, and believe him to be a person of veracity, and that the truth of his statement may be depended on.

AARON G. FISH, Justice.

PRICE OF CLOVER SEED IN KENTUCKY.

Clover seed is held at \$25 a bushel in this place. This monstrous price is the result of various causes—first, the limited supply from Ohio and Pennsylvania, and second, the difficulty of transportation, owing to the low state of the Ohio river. The latter cause is not now, however, in operation, as the late rains have rendered the streams navigable, and a reduction of the price of seed may be calculated upon. But it is stated that, in addition to the crop of seed being shortened by the unprecedented drought of last summer, an unusual quantity has been shipped abroad, and that the price cannot materially decline even after the resumption of navigation. We have no statistics on this subject, and the consumers must look to the facts for themselves; but we have no doubt the high prices demanded the last and present season for this article, will open the eyes of our farmers to the necessity of producing their own supplies; and if this result should be effected, the evil of the present high prices will prove an ultimate blessing, for a vast sum will be saved to the state which would otherwise be sent out of it. We entreat our readers to consider whether they would not subserve their own interests in saving from their clover fields enough seed for their own use, instead of trusting to the capricious supplies, and more capricious prices of that furnished us out of the state. It need not trouble our farmers to know how to get out and clean the seed, for we have the experience of some of the best cultivators in Kentucky, that it is better sown in the chaff than cleaned; and the only necessity

of cleaning is, to prepare the article for export.—In Kentucky, we shall not probably want to engage in the export of this article; but if we did, we can learn the processes of cleaning as well as any other people. We repeat the hope, expressed last season, that no Kentucky farmer will ever buy a pound of clover seed, who has a field from which he can save enough for sowing the following year.—*Franklin Farmer.*

—A two year old colt has lately been sold in Kentucky for \$20,000.

MORUS MULTICAULIS.

The subscriber offers for sale 16,000 Mulberry Trees and 200,000 cuttings, warranted to be the genuine *Morus Multicaulis*. The trees are remarkably healthy and will be delivered at such time as will suit the convenience of purchasers. Orders (for not less than 100 trees) from the country will be promptly attended to.

M. POTTER,
fe26 46 South Charles street.

AGRICULTURAL IMPLEMENTS.

John T. Durning & Co. encouraged by the favors shown them in the past year, are determined to offer no article to their friends but such as they can warrant, made of the very best materials, finished in a superior manner, of the newest patterns, and at liberal prices.

From John T. D.'s long experience in the manufacture of these articles he flatters himself that he can give entire satisfaction to those farmers, Commission Merchants, Captains and others who may favor him with their orders.

J. T. D. & Co. wish especially to recommend a lately improved and superior "Wheat Fan" as being admirably adapted to clean effectually and fast—price \$25.—any new machine coming into market may be obtained to order.

All orders for field and garden seeds, of the best kinds and fresh, will also be furnished at our Agricultural Establishment, upon the usual terms, by Thomas Denny, seedsman, Grant St. Baltimore, rear of Messrs. Dinsmore & Kyle. fe26

A SETTER FOR SALE.

The subscriber has for sale a thorough bred Setter, eleven months old. He has been but little hunted but gives indication of making a first rate dog. He comes of a strain remarkable for their fine performance in the field, and is a beautiful rich brown white in the breast and face. His price is \$30. All applications by letter must be post paid. fe26 EDWARD. P. ROBERTS.

SEEDS, PLANTS, FLOWERS.



The subscriber offers for sale at his establishment a fresh supply of GARDEN SEEDS of the very best quality; those that cannot be grown in this country he imports direct from Europe from a source that can be relied on.

Besides a large collection of GREENHOUSE, hardy ORNAMENTAL TREES and Shrubs, Herbaceous Plants, and Bulbous Roots, and a choice collection of the very finest double Dahlias offered for sale, all on reasonable terms, wholesale or retail.

Also on hand a few bushels of ITALIAN RYE GRASS, with 100 bush. ITALIAN SPRING WHEAT, of the true kind. All orders for Fruit and Ornamental Trees, or any thing appertaining to his establishment will be strictly attended to, by JOHN FEAST, Florist & Seedsman, cor. of Lexington and Pine sts. ja22 tf Baltimore.

ROBERTS' SILK MANUAL.

Price per single copy, 37½ cts.—to dealers who take 100 copies or more, a deduction of 33½ per cent. discount will be made; to those who take a less number, 20 per ct. will be allowed. Address E. P. Roberts & S. Sands, Farmer & Gardener office, Baltimore, Md.

CLAIRMOUNT NURSERY, NEAR BALTIMORE.

The subscriber offers for sale a general assortment of grafted FRUIT TREES, as usual—amongst them are 20,000 thrifty Peach Trees, of good size for transplanting, of the most choice varieties; Catawba, Isabella and other choice Grape Plants, two and three years old, at reduced prices by the hundred; English Gooseberry, Currant, Raspberry and Strawberry Plants. Also, many thousands of Ornamental Trees, suitable for planting in streets and lawns, 15 feet high, of the following sorts—Chinese Alanthus, or Tree of Heaven; Silver leaf and Tulip Poplar; Silverleaf Sugar, red flowering and Ashel'd Maple; English, Dutch and Scotch Elm, European and American Linden; Common and Pinkflowering Locust; Catalpa; Paper Mulberry, and the much admired European Larch; White and Red Flowering Horse Chestnut; English and other Walnut, Macelusa or Osage Orange—the four latter named trees are of smaller size. Several thousand Evergreen Trees of the following kinds—Balsam Fir, Arbor Vitea, American and from India; Weymouth Pine; American or Black Spruce; dwarf and tree Box; Roses and other Ornamental Shrubs, Vines and Creepers, large Plants; giant Asparagus; Hop and Horse Hadish Roots.

Form any other articles and further particulars, see printed and priced Catalogues, which will be sent by mail gratis to persons requesting them.

MORUS MULTICAULIS MULBERRY.

The subscriber has for sale, a few thousand TREES and CUTTINGS of his own raising, at regular prices; having raised this tree for seven years, and having the advantage of much experience in raising this valuable tree, purchasers may rely on getting a genuine article in a perfect state of preservation.

Also, 10,000 MORUS ALBA, or Italian White Mulberry Trees, 2 to 6 feet high, at \$2 to \$10 per hundred, and less per thousand.

Orders sent by mail or otherwise will be promptly and carefully executed, and forwarded to any part of the U. S. when more convenient. Orders may also be left with R. Sinclair & Co., Light street, Baltimore. fe26

FRESH SUPPLY OF FIELD AND GARDEN SEEDS.

BY THOMAS DENNY, Ellicott near Pratt street, Baltimore, who has just received general supply of GARDEN SEEDS, the growth of 1839, part of which was raised by the first Seedsmen of this country, and a part imported, all of which will be sold wholesale and retail, upon the best terms, such as

GARDEN PEAS; Early and Late assorted Cabbage; Cauliflowers; Radish; Lettuce; Cucumber; Parsnip; Carrot; Onion; Rutabaga Turnip; Parsnip seed of all kinds, Garden Beets assorted; French Sugar Beet; Mangel Wurtzell, &c. &c. Also Field SEEDS, such as Early Sugar, Early White, Sioux, Chin or Tree Corn; Dutton, Baden and Twin Corn; Red Clover; Luzerne and White Dutch Clover; Timothy; Orchard; Herds; Millet, Tall Meadow Oats; superior Seed Oats; Spring Wheat; Spring Rye; Spring Barley; Seed Buckwheat; blue and Kentucky Lawn Grass, &c. &c.

Also GARDEN TOOLS, assorted sizes, and late improved patterns; Bird Seed of all kinds, Double Dahlias; Hyacinths, and Polyanthus, assorted, and selected for beauty and richness of colours, together with choice Flower Seed, assorted; Mulberry Trees; Fruit and Ornamental Trees; Silk worm Eggs; &c.; Agricultural Books; Silk Manuals; &c. Rohan Potatoes—Early Seedling do. &c. All orders by mail or otherwise will meet with early attention and dispatch, on the best terms for cash. ja29 8t

FOR RENT,

A lot of ground, containing 12 acres. It is situated near the York Road, a short distance this side the first toll gate. It has on it two comfortable frame dwelling houses, and extensive and convenient arrangements for cows and horses, with a pump of excellent water. The soil and situation have been said by persons engaged in the mulberry and silk business, to be admirably suited to that branch of agriculture. The advertiser would give the land and improvements, to a person who might wish to embark in that business, for a reasonable share of the profits, the renter to be at all expense, and give his personal attention. The stabling, &c., could at a trifling expense be converted into cocoonnaries. Apply at the office of the Farmer and Gardener. fe26 3t

FOR SALE,

A valuable FARM of prime soil, on the Western Run in Baltimore county, about two miles north west of the 14th mile stone of the Baltimore and York turnpike road, and at the same distance from the depot of the Baltimore and Susquehanna rail road, at Cockey's tavern, in a rich, highly cultivated and healthy tract of country.

This farm contains from 260 to 270 acres, having a full proportion in wood, much of which is building timber, peculiarly valuable in that neighborhood; is in the best state of cultivation; a considerable part in productive timothy meadow, and the residue of the arable land, not in grain, is well set in clover, the whole under good fencing, laid off into convenient fields, each of which is well watered. The farm has a large quarry of excellent building stone. There are on the premises an apple orchard of select fruit trees, which seldom fail to bear abundantly; a valuable mill seat on the Western Run, with a race already dug. There is no location in the country more favorable for a grist mill, having the advantage of a rich and thickly settled neighborhood, and a good public road leading thence to the turnpike road. Buildings substantial and convenient, being a STONE DWELLING, and kitchen of two stories; a large stone Switzerland barn, with cedar roof and extensive stabling below; large hay house and stable for cattle; stone milk house near the dwelling, with a spring of fine never failing water, with other out-houses. On the country road near the mill-seat a good house and shop for a mechanic, under rent to a good tenant. It is well known the lands on the Western Run are in every respect equal, if not superior to any in the county. Adjoining or near are the lands of Col. N. Bosley, Daniel Bosley, Thos. Matthews and others. The water power, with about 20 acres of land, is so situated that they may be detached and sold separately, without injury to the rest of the farm for agricultural purposes. Terms of sale will be liberal. Apply to

NATHANIEL CHILDS,
on the premises, or to
WILLIAM J. WARD,
oc 23 tf Fayette, near Calvert st. Baltimore.

CHILDS' PATENT SHAVING OR SHARPENING POWDERS.

As tranquility of mind is essential to the convalescence of the body, so will these powders prove from the usefulness and relief they afford to those who have to shave daily, and particularly dyspeptic invalids, whose enfeebled nerves are rendered more feeble by the least agitation.—Their use I strongly urge, and warrant their effect in producing feelings as agreeable and as soothing as an anodyne; and to those in health, instead of an irksome undertaking, the operation becomes a pleasurable pastime. I deem it my duty to recommend to the public this invaluable article, which may be had at the store of the inventor, No. 88 South Street, Bowly's Wharf.—James Gould, No. 136, Market Street—or at Canfield & Brother's, South-East corner of Baltimore and Charles sts. X

Feb 19

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SILK AGENCY,

Corner of E. and 7th streets, Washington City, D. C.—The subscriber having commenced an Agency for the purchase and sale of SILK MULBERRY TREES, and all articles connected with the growing of Silk, offers for sale the following varieties of Mulberry Trees at Baltimore prices, viz. Multicaulis, Alpine, Broussa, White Italian and Canton; also Mammoth White Silk Worm's Eggs, warranted to be of superior quality. All the recent publications on silk growing for sale, and subscriptions received for the various periodicals devoted to that subject. no 20 J. F. CALLAN.

CHINESE MULBERRY TREES.

American Silk Agency, No. 95, Walnut st. Philadelphia The subscriber having opened a permanent Agency for the purchase and sale of all articles connected with the culture and manufacture of Silk in the United States, offers for sale all the different varieties of MULBERRY TREES, suitable for raising the SILK WORM; viz: *Morus Multicaulis* Alpinese, *Brussa Multicaulis* Seedlings. *Morus Expansa*, *Multicaulis* Cuttings, Improved Italian Trees, &c. Also, Cuttings from Norton's Virginia Seedlings, and Cunningham's Prince Edward GRAPE VINES. These vines produce an abundant crop of fruit, warranted not to rot or mildew and are fine for the table, and capable of yielding the finest wines.

S. C. CLEVELAND, Agent.

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every MONDAY

	PER	FROM	TO
BEANS, white field,	bushel.	2 50	
CATTLE, on the hoof,	100lbs	9 00	10 00
CORN, yellow	bushel	—	—
White	"	—	—
COTTON, Virginia,	pound	15	15½
North Carolina,	"	13½	14½
Upland,	"	14½	15
Louisiana — Alabama	"	15	16
FEATHERS,	pound.	53	
FLAXSEED,	bushel.	1 56	1 62
FLOUR & MEAL—Best wh. wh'tfam	barrel.	10 00	10 50
Do. do. baker's	"	—	—
Superior, st. from stores	"	7 87	8 06
" wagon price,	"	7 75	—
City Mills, super.	"	—	8 12
" extra	"	8 37	8 50
Susquehanna,	"	—	—
Rye,	"	5 50	—
Kiln-dried Meal, in hhd.	hhd.	18 50	—
do. in bbls.	bbl.	4 25	—
GRASS SEEDS, wholes. red Clover,	bushel.	14 00	15 00
Kentucky blue	"	—	—
Timothy (herds of the north)	"	00	—
Orchard,	"	2 00	2 50
Tall meadow Oat,	"	—	3 00
Herds, or red top,	"	—	1 00
HAY, in bulk,	ton.	12 00	16 00
HEMP, country, dew rotted,	pound.	6	7
" water rotted,	"	7	—
HOGS, on the hoof,	100lb.	9 37	9 50
Slaughtered,	"	9 00	9 50
HOPS—first sort,	pound.	20	—
second,	"	18	—
refuse,	"	—	—
LINE,	bushel.	32	33
MUSTARD SEED, Domestic, —; blk.	"	3 50	4 00
OATS,	"	45	—
PEAS, red eye,	bushel.	—	1 12
Black eye,	"	1 00	1 12
Lady,	"	—	—
PLASTER PARIS, in the stone, cargo,	ton.	4 25	—
Ground,	barrel.	1 50	—
PALMA CHRISTA BEAN,	bushel.	—	—
RAGS,	pound.	3	4
RYE,	bushel.	100	105
Susquehanna,	"	—	none
TOBACCO, crop, common,	100lbs	5 00	5 50
" brown and red,	"	6 00	6 50
" fine red,	"	9 00	12 00
" wrappery, suitable	"	—	—
" for segars,	"	10 00	20 00
" yellow and red,	"	10 00	14 00
" good yellow,	"	10 00	15 00
" fine yellow,	"	12 00	15 00
Seconds, as in quality,	"	6 00	—
" ground leaf,	"	7 00	9 00
Virginia,	"	6 00	10 00
Rappahannock,	"	—	—
Kentucky,	"	6 00	8 00
WHEAT, white,	bushel.	—	—
Red, best	"	1 70	1 75
Maryland	"	—	—
WHISKEY, 1st pf. in bbls.	gallon.	41	45
" in hhd.	"	41	—
" wagon price,	bbls	—	41
WAGON FREIGHTS, to Pittsburgh,	100lbs	3 00	—
To Wheeling,	"	3 00	—
WOOL, Prime & Saxon Fleeces,	pound.	50 to 55	—
Full Merino,	"	45 50	—
Three fourths Merino,	"	40 45	—
One half do.	"	35 40	—
Common & one fourth Meri.	"	35 40	—
Pulled,	"	30 33	—
POTATOES, 60 to 70 cts. a bushel.			

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,	barrel.	—	—
BACON, ham, new, Balt. cured	pound.	13	15
Shoulders, do.	"	12½	13
Middlings, do.	"	12½	—
Assorted, country,	"	10½	—
BUTTER, printed, in lbs. & half lbs.	"	31½	50
Roll,	"	25	31½
CIDER,	barrel.	1 75	2 00
CALVES, three to six weeks old	each.	5 00	6 00
COWS, new milch,	"	30 00	40 00
Dry,	"	—	—
CORN MEAL, for family use,	100lbs.	2 00	2 12
CHOP RYE,	"	—	1 60
EGGS,	dozen.	25	—
FISH, Shad, No. 1, Susquehanna,	barrel.	6 00	6 25
No. 2,	"	—	—
Herrings, salted, No. 1,	"	6 00	6 25
Mackerel, No. 1, ———— No. 2	"	11 75	13 50
No. 3,	"	7 50	—
Cod, salted,	cwt.	3 25	3 37½
LARD,	pound.	12	13½

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

		VIRGINIA.
U. S. Bank,	par	Farmers Bank of Virg. par
Branch at Baltimore,	do	Bank of Virginia,
Other Branches,	do	Branch at Fredericksburg, do
MARYLAND.		Petersburg,
Banks in Baltimore,	par	Norfolk,
Hagerstown,	o	Winchester,
Frederick,	do	Lynchburg,
Westminster,	do	Danville,
Farmers' Bank of Mary'd, do	do	Bank of Valley, Winch. par
Do. payable at Easton,	do	Branch at Romney, ... par
Salisbury, ... 1 per ct. dis	do	Do. Charlestown, par
Cumberland,	par	Do. Leesburg, ... par
Millington,	do	Wheeling Banks, ... 2½
DISTRICT.		Ohio Banks, generally 3
Washington,	do	New Jersey Banks gen. 3
Georgetown, } Banks, ½ p.c.		New York City, ... par
Alexandria, }		New York State, ... do ½
PENNSYLVANIA.		Massachusetts, ... 1½a2
Philadelphia,	par	Connecticut, ... 1½a2
Chambersburg,	½	New Hampshire, ... 1½a2
Gettysburg,	½	Maine, ... 1½a2
Pittsburg,	2½	Rhode Island, ... 1½a2
York,	½	North Carolina, ... 3a2½
Other Pennsylvania Bks. 2		South Carolina, ... 4a5
Delaware [under \$5] ... 4		Georgia, ... 5a5½
Do. [over \$5] ... 1½		New Orleans, ... 7a8
Michigan Banks,	10	
Canadian do.	10	

AGRICULTURAL IMPLEMENTS.

THE Subscriber acknowledges with gratitude the liberal patronage he has received from the public since the establishment of his Repository in 1825.—During this long period he has studied successfully his own interest by identifying them with the interest of his customers in being prompt and faithful in the execution of their orders.

His present facilities of manufacturing agricultural implements, are not surpassed by any other establishment in this country, he can therefore afford them on as reasonable terms as any other person for the same quality of work. His present stock of implements are extensive both in quality and variety, to which he would invite the attention of those who wish to purchase.

A liberal discount will be made to all cash purchasers, and to those who purchase to sell again.

The following names are some of his leading articles viz: His *PATENT CYLINDRICAL STRAW CUTTERS*, wood and iron frames, but all with his patent double eccentric feeders, with or without extra Knives, prices varying from \$33 to \$110, subject to cash discount, he challenges the world to produce a better machine for cutting long forage, Myer's *WHEAT FAN* and *ELLIOTT'S PATENT HORIZONTAL WHEAT FANS*, both a very superior article. Fox & Borland's *PATENT THRESHING MACHINES* and Martineau's *PATENT HORSE POWERS*, also superior articles.—A great variety of *PLOUGHS*, wrought and cast Shares, of all sizes and prices; Gideon Davis's improved

PLOUGHS, of Davis's own make of Patterns, which are sufficiently known to the public not to require commendation; 100 *CORN CULTIVATORS*, also expanding *CULTIVATORS*, both iron and wood frames, and new plan; *TOBACCO CULTIVATORS*.

F. H. Smith's *PATENT LIME SPREADERS*, the utility of which has been made known to the public; together with a general assortment of *FARMING IMPLEMENTS*; *PLOUGH CASTINGS* of every description and superior quality kept constantly on hand at retail or by the ton; also, *MACHINE* and other *CASTINGS* furnished at short notice and on reasonable terms, his iron Foundry being furnished with the best materials and experienced workmen with ample machinery running by steam power for turning and fitting up machinery.

ALSO—Constantly on hand D. Landreth's superior *GARDEN SEEDS*;—In store *POTATOES* and common *SEED OATS*, *TIMOTHY* and *HERDS SEEDS* all of superior quality.—All orders will be promptly attended to.

JONATHAN S. EASTMAN,

Farmers' Repository, Pratt street,
Near the Baltimore & Ohio Rail Road Depot.

BRITISH GARDEN SEEDS, &c. &c.

ROBERT SINCLAIR, JR. & CO.

ARE JUST OPENING a superior lot of GARDEN and European FIELD SEEDS, received by the several late arrivals from Europe and from their Seed Gardens near this city. The principal Seeds received and for sale, are viz:—

1100 pounds *EARLY CABBAGE SEEDS* consisting principally of Early York, Bullock's-heart, Emperor and Flat Battersea.

600 pounds *LATE CABBAGE SEEDS*—the Flat Dutch, Drum head and Globe Savoy are included in this lot, raised under our inspection and are particularly fine.

700 pounds London Scarlet short top *RADISH*,—early, round, long White, Yellow Turnip and Spanish *RADISH SEED*.

8 casks *BET SEED*, of several Dark Red Garden sorts. Yellow and White Sugar and Mangelwurzel Beet Seed.

800 pounds Rutabaga, Hybrid and other *TURNIP SEED*.

16 casks early and marrowfat *PEAS*, in prime order. Also, London Cauliflower and Broccoli Seed, Cross and Cabbage Lettuce, Tomato, Squash, Scotch Kale, Parsnip Seed, Carrot several kinds, Melons, Cucumbers, Spinach, Early Corn, bunch and pole Beans, English Windsor Beans, &c.

23 casks English and Italian Ray Grass, Scotch field Peas and Beans, Potato Oats weighing 44 lbs per bushel. Spring Vetches, White Clover, Lucern English Lawn Grass, early round and kidney Potatoes.

In store.—Italian Spring Wheat, Spring Barley, Kentucky Blue Grass, Baden and Twin Corn, Orchard, Herds and Meadow Oat Grass Seed, Common Red Sapling Cloverseed, and every other variety American field Seed.

For sale as usual.—*AGRICULTURAL IMPLEMENTS* and *TOOLS* of every description, *BOOKS* on Cultivation and management of stocks.

Orders for *TREES* and *PLANTS*, supplied at the shortest notice. feb 12 w4w

SPLENDID BLOODED STOCK FOR SALE.

The proprietor of Covington farm will dispose of the following fine bulls on reasonable terms, viz.

One bull two and a half years old.

One do. six months old.

of the improved Durham short horn breed; the dam of the first was got by the celebrated bull Bolivar; for size, form and beauty they are not surpassed by any animal in the state.

Three *Devon Bulls*, one of which is seven years old next spring, and the largest *Devon* in the State. The *Devons* are from the stock of the late Wm. Patterson, and of undoubted purity.

Two half *Devon* bulls.

Two bulls half improved Durham short horn, and half *Devon*.

One splendid bull, a cross of the Bakewell, Alderney and *Devon*.

One bull, half Alderney and half *Holstein*.

These fine animals may be seen at Covington farm, near Petersville, Frederick county, Md. on application to James L. Hawkins, Baltimore, or to

se 11 f FREDERICK FLEET, Manger.

THE AMERICAN FARMER.

The proprietors of this paper have a few complete sets of this work on hand, which they will dispose of at the reduced price of \$50 a set.
oct. 16 3

THE FARMER & GARDENER

[PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, E. P. ROBERTS AND SAMUEL SANDS—EDITED BY E. P. ROBERTS.]

No. 45.

BALTIMORE, MD. MARCH 5, 1839.

Vol. V.

THIS publication is the successor of the late **AMERICAN FARMER** and is published at the office, at the N. W. corner of Baltimore and North streets, over the Patriot office, at two DOLLARS AND FIFTY CENTS per annum, if paid within one month from the time of subscribing, or \$3 if after that time. All letters to be postpaid.

BALTIMORE: TUESDAY, MARCH 5, 1839.

WORK FOR MARCH.

ON THE FARM.

As the labors of the year may be said to begin on the farm, mainly, with this month, it is but meet that we should point out those duties which it is indispensable to be performed, in order to secure success to the toils of the husbandman during the season: And in designating them we are not influenced by the vain hope of being able of saying any thing novel, but merely of reminding the tillers of the earth of those things which their interests require should be attended to, and we shall do this, because we know, from the treacherous nature of the human memory, that such admonition is of use, and particularly so, as it is all important that the labor of various kinds on a plantation should be done at the proper season. With these introductory remarks we shall enter into details.

Fences. Every provident farmer and planter should now give his fences a thorough overhauling, and repair such parts as require it, and replace those others which need it with new. By such attention, he will not only secure his crops against the trespasses of his own and neighbor's stock, but prevent those unpleasant collisions, which too often disturb the social relations of those who have been heretofore, and ought to remain friends; for amongst the causes which tend to abrupt the harmony of neighbors, there are none more fruitful of discord than those which emanate from the trespassing of stock.

Drains. Be careful to clean out your drains and ditches during this month, and to secure their sides from caving in. The earlier the better that this work is done, as by relieving your meadows and fields from superabundant water, the sooner will the genial influence of the sun's rays cause vegetation to start, and thus hasten the growth of your grass crops.

GRASS SEEDS. Those who may not have

put down their grain fields to grass last autumn, should do so in the beginning of this month. If it be your object to sow clover seed, be careful not to spare your seed; for you may rest assured if you do, weeds will occupy the space which should be filled with that renovating and nutritious grass. Less than twelve pounds to the acre should not be sown, if sown alone; if sown with Timothy, eight pounds, and half a peck of the latter seed will be a good proportion. If sown with herds-grass or red-top, eight pounds of clover seed and half a bushel of the former is the proper quantity of each. If with Rye grass, eight pounds of clover and one bushel of the former. If with orchard grass, eight pounds of clover seed and one bushel of the latter. After sowing your grass seed, harrow it in and then pass your roller over it. You need not apprehend injuring your grain by these operations, for though you may tear up some of the roots, yet the working and lightening of the ground, will do infinitely more benefit than harm to the grain, besides rendering your chance of setting your grass much greater. But you should recollect that what may be torn up by the harrow will be replaced by the roller, and that the tillering will be greatly increased by the subdivision of the roots.

Towards the latter end of the month, if you sow a bushel of Plaster on each acre, you will experience decided benefit, inasmuch as it will encourage the growth of white clover, advance that of the red and attract moisture from the atmosphere to nurture and sustain your grain against drought.

Grain Fields. All grain fields of the last fall's sowing, whether sown to grass this spring or not, would be benefitted by pressing the harrow and roller over them as soon as the ground is sufficiently dry to bear the pressure of the horse's hoofs. We have no doubt if these operations are skilfully performed, and at the proper period, that they will increase the yield of grain twenty per cent. And for the reason we have assigned, these operations should be followed by plastering, though no grass seeds be sown, as the carpeting of white clover, which will thereby be produced, will, after your grain is cut down, protect the soil from the deleterious influences of evaporation,

besides rendering your stubble-fields infinitely better pastures than they would otherwise be.

Orchard Grass, if sown alone requires two bushels of seed to the acre.

Oats. As soon as the ground which you allot for oats is dry enough, plough it up, and put in your crop of this grain: plough it well, then harrow thoroughly, say twice; sow your oats immediately after the last harrowing, at the rate of two bushels to the acre, then plough it in about three inches deep, pass the harrow over it again, and if you do not purpose sowing grass seeds, finish off by rolling. If however you desire to sow timothy, clover, or other grass seeds, you should sow those seeds, then brush them in with a fine light seed harrow, and if you have not that implement, with a brush harrow, and afterwards roll. When your oats are up about three inches, sow a bushel of plaster per acre, for the reasons before assigned.

Recollect that all applications of plaster should be made very early in the morning, when the growing plants and earth are moist—and recollect, also, that the earliest sown oats succeeds best, and the better you prepare your ground the greater will be the yield.

Meadows and Grass Lands. If you have the means, your meadows and grass lands should be top-dressed as early this month as possible, with stable manure, well rotted dung, compost, or ashes, and if you have neither one nor the other of these resources to spare, three or four bushels of salt to the acre will be found useful, except to clover, on which a bushel of plaster per acre will be better. By all means do not omit to plaster your clover fields as soon as leaves attain the size of an eleven penny bit.

The following proportions of grass seed to the acre, it may not be amiss to annex.

Clover, when sown alone	12 pounds
Timothy, " " "	1 peck
Herds Grass, " " "	1 bushel
Orchard Grass, " " "	2 bushels
Rye Grass, " " "	2 bushels
Burnek, " " "	20 lbs.
Lucerne, " " "	8 lbs.

For a pasture for grazing the following mixtures of seed, would be found excellent, viz: 6

lbs. of *Clover* seed, 1 peck of *Herds grass*, and half a bushel of *Orchard grass* seed—or 6 lbs. *Clover*, half bushel of *Rye grass* and half a bushel of *Tall meadow oat* seeds.

For seeding a *park* or *thinned woods*, the following would be best: 4 lbs. of *Kentucky Blue Grass Seed*; 6 lbs. of *clover seed* and half bushel of *Orchard grass*, the two latter would protect the former the first year, add to the quality of the pasture the second season, and gradually resign their places to the first, which would in the end, like a successful general, be sure to possess itself of the field, and form in the end the best of all woodland pastures; but as it delights in *lime-stone* land, should the spot allotted for its culture not have *lime* in its bosom, a few bushels to the acre, say four or five, should be sown on it.

Barley. South of Maryland, *Barley* may be sown this month. It delights in a rich, loamy dry soil, or is the better of being preceded by a cleansing crop. It would be better that the ground had been ploughed last fall; but if this has not been done, give it a deep ploughing, then harrow thoroughly; after which sow your barley and plough it in shallow, say two or three inches, and then again harrow and roll. Quantity of seed to the acre from 6 to 8 pecks.

Hauling out Manure. Employ your time in hauling out your manure to your corn and other grounds, where you want to use it, drop it in suitable sized fields, and while one portion of your force is thus engaged, let another be occupied in throwing a slight covering of earth over the heaps, to prevent loss from evaporation. This will be an economy of time.

Sprouting. If you have any new ground which you omitted to sprout in August last, do so this month, and if you have not done so before, have the stumps stript of bark, and cut the lateral roots from the main trunk.

Beets. Let such ground as you design for field beet culture be now ploughed deeply, as soon as the earth is dry enough to do so without injury, and let it remain until it is time to put in your seed, when it should be manured well, again ploughed, thoroughly harrowed and rolled before being planted.

Morus Multicaulis. As the culture of this species of the *Mulberry* is becoming a part of our husbandry, it may not be amiss to say that the sooner the cuttings are placed in the hot beds this month the better, and that as soon as the ground is sufficiently dry to ensure perfect pulverization, they ought to be planted in open culture—the sooner the better in either place. For a particular

description of the most approved methods of cultivating it, see *Roberts' Silk Manual*.

Milch Cows. As the period is fast arriving when your cows will be calving, you should be particular to feed them well. Give them plenty of good hay and daily portions of roots or *generous* slops; the roots will be all the better for being boiled: and whether you give them roots or slops, let each be salted, and see that they have plenty of good clean fresh water. As your cows are about calving, give them separate apartments, where they may pass through their labor undisturbed by obtrusion. After having calved give her good warm nourishing drinks.

Yearlings and Heifers. Give to these increased attention and see that they are well fed through this month. And if you can spare the labor, let them, as well as your cows, be daily curried and rubbed down with straw; in the *cavities* behind the horns of your cows, place twice during this month, a teaspoonful of spirits of turpentine, it will prevent the hollow-horn.

Early Turnips. As your stock of vegetables will soon be speedily exhausted, sow a small patch of turnips for table use. The sooner you get them in, after the ground is dry enough to allow of being thoroughly pulverized, the better. By appropriating one eighth of an acre to this purpose, you will secure to your family a supply of this excellent vegetable during the better part of the summer.

Sheep. As your ewes bring forth their lambs, let them be well fed with good hay and roots. If you have no roots for such purpose, give them a small quantity of Indian meal, daily, in addition to their hay, and do not forget to salt them.

Carrots, Parsnips, and Mangel Wurtzel.—If you design raising either of these roots in field culture this season, as soon as the ground you allot for them is dry enough, give it a deep ploughing, preparatory to the one which is to immediately precede their being sown. And here let us assure you, that if you regard your interest, and desire to keep your cows to their milk during winter, you will assuredly plant an acre or two of one of the following roots—*Sugar Beet*, *Mangel Wurtzel*, *Ruta Baga*, *Parsnips* or *Carrots*. One acre well manured, properly ploughed, pulverized and cultivated, will yield roots enough to carry ten cows, with hay, well through the winter, from the 1st day of December till the 1st day of May, when the pastures come in to the farmer's relief. We prefer the *Sugar Beet*, and from experience confidently assert, that 1000 bushels can very readily be raised upon an acre. This is rating

the beets at less than 3 lbs. each, and we have seen them weigh $18\frac{1}{2}$ lbs. and read of them having weighed $24\frac{1}{2}$ lbs.

Agricultural Implements.—Have all your agricultural tools and implements carefully overhauled and repaired, so that, when you may be called upon to use them, they will be ready for use; by thus taking time by the forelock, *time*, which is money, will be economised, and the operations of the farm go on pleasantly and profitably.

Horses.—Give to each of your horses a few mashies of chopt rye, shorts, or bran, and cut straw, mixed up with a strong decoction of sassafras, after which for two or three days in succession, mix in with their feed, a half pint of boiled flaxseed to each horse. This treatment will increase their appetites, purify their blood, and make them shed their coats kindly—and be sure that those having charge of them do not spare the currycomb and brush, or whisp of straw; for you may rest assured, that thorough currying and rubbing of their hides is just as essential as feeding.

MANGEL WURTZEL.

This root, in our judgment, is decidedly to be preferred to *ruta бага*. In the first place it is a surer crop. If planted early, it escapes the insects, which are so fatal to all the turnip tribes. You can produce as much or more from the same land, and then it is worth more for cattle and especially for milch cows. Turnips give a bad flavor to the milk and butter: *mangel wurtzel*, being sweet, improves the flavor. There is one advantage too, in harvesting. They are drawn from the ground clean, like a carrot, and have few or none of those fibrous roots which are attached to *ruta бага*, and which either require much labor in cleaning them, or leave "a peck of dirt" for the cows to eat with them. They are an admirable crop, and a luxury to cattle in winter. It is a cruelty to keep cows on dry hay six months.—Give them esculent roots and they will repay you with a generous interest. Every man who keeps a cow, should mark off in his garden six rods long and half a rod wide, and raise upon it forty bushels of *mangel wurtzel*. They will make his cow give milk in the winter, almost equal to green feed in summer.—*Maine Cultivator*.

[One great advantage of the *Mangel Wurtzel* is, that the leaves may be stript while growing, (care being taken to leave the upper leaves untouched,) by which several tons of good provender may be obtained for milch cows at that season of the year when the pastures fail. The same may also be said in favor of the *sugar beet*. If proper care be taken in the cultivation of either of these roots a thousand bushels and more to the acre may be grown. This quantity can be produced at an average weight of less than 3 lbs. per beet, and they have each been grown to weigh

from 18½ to 24½ lbs.; the first named weight we have seen ourself.—*Editor Farmer and Gardener.*]

ROHAN POTATOES.

An extract from a Letter from ROBERT H. GARDINER, Esq. to the Incidental Committee of the *Kennebec Agricultural Society*.

Gardiner, Oct. 12, 1838.

GENTLEMEN,—The potatoes, which I presented yesterday to your examination, will I believe prove valuable varieties of our great staple agricultural product. The first the "Rohan" is principally remarkable for its prolific qualities. I received last spring from H. Colman, (who has labored so indefatigably in introducing into successful cultivation the seeds of new varieties of grains and vegetables,) two potatoes of this species, weighing about half a pound each. I cut them into as many pieces, as I could find eyes, and planted them in 20 hills in a rich part of my garden, but without manure. From these I dug this autumn a little more than two bushels. I could not weigh the whole product, having given away some of the potatoes, when first dug; but one bushel weighed 66 lbs.—Two of the potatoes, the largest on the top of the basket, though perhaps not the largest in the parcel, weighed, one 2 lbs. 5 oz. and the other 2 lbs. 3 oz. These however, are insignificant in size, compared to those in the subjoined account from a recent English work entitled "*Sacred Philosophy of the Season*," and which is there quoted from "the journal of Agriculture, vol. 6, p. 145." "The Rohan potatoes, a variety raised on the continent a few years ago from the seed, is remarkable for the size of its stalks, and its prolific powers. Prince Charles de Rohan, from whom it takes its name, writing of it from Geneva in 1834, states that the stalks reach 6 or 7 feet in height, and require to be supported on transverse stakes; and thus the tubers sometimes increase to such enormous size, that a single potatoe will weigh more than 13 lbs., and as to quantity of produce, he mentions the following example:—The attorney of the abbey of Auturive, Canton of Friburg, to whom I had given two tubers two years ago, and who, delighted with the first harvest, after having eaten and given some to his friends, planted the rest, obtained last autumn 6 double horse loads, and 8 scuttles full." This account is vague and may be extravagant, but from my own experiment I have no doubt of its being a very productive potatoe.

I have only cooked a single potatoe, intending the rest for seed for myself and friends. The potatoe is mealy, and resembles in taste, the common yellow potatoe, being inferior in quality to the *Chenango** and the *Butman*.

[*There is, perhaps, nothing in which men differ more than in taste: what may be considered a luxury of the most exquisite flavor by one man, would be rejected by another as wholly unpalatable; therefore, we shall not pretend to gainsay the judgment of Mr. Gardiner, with respect to the quality of the *Rohan* potato; but will merely say, that, in our opinion, as an eating potato for the table, the *Rohan* is very inferior to the *Chenango*,

or *Mercer*. Agreeably to our judgment, as a cooking potato, the *Mercer*, which is also called the *Chenango*, ranks first; and although the *Rohan* is a very good potato for table use, we think it by no means entitled to rank either as first or second in point of quality. If we were called upon to give our opinion of the *Rohan*, we should say, that its greatest virtue consists in its *productiveness*; and that if they can be made to yield in this country only one fourth what European writers say they have produced there, there is no crop more worthy of the farmer's consideration for feeding stock.—*Ed. Far. & Gardener.*]

MANAGEMENT OF BEES.

Early in the spring, from deficiency in the stock of winter honey, the bees of one hive are often found to rob those of another. To prevent this, I know of no better way than to make the entry hole of the hive that contains the most honey so small that it will barely admit them to go in and out. But the greatest object which could claim the attention of every one who has the charge of bees, is to prevent their destruction by worms. Perhaps two-thirds of the bees on the Island have within a few years been destroyed by the insect called the miller. It enters the hive and lays eggs, which soon produce worms in such numbers as to destroy the bees or drive them from the hives. To prevent the access of worms, the hives should be perfectly tight, and have but one hole at the lower edge of the hive; the continual passing of the bees will prevent them. But the most sure way of keeping them out is to have a well made hive, to act very level on a board, which shall project out in front of the hive seven inches, to have a channel or groove about ten inches long, and two wide, and half an inch deep out in this board, and then have a board about four inches wide nailed over the groove outside of the hive. The bees will enter the hive by this groove—the entry hole being at such a distance (four inches) from the hive, no kind of insect will ever enter. I have observed that bees which deposit their honey in trees very generally have worms among them, if the hole is large or if there are two or three small ones. But when the hole has been small I have always found the honey pure and free from worms. Besides this great advantage, the bees are less annoyed by the dust and leaves blowing in during dry weather and rain beating in during heavy storms. All kinds of dirt are very offensive to bees. The hives should be of new clean boards. To have them quite clean is much better than to rub them with sugar or salt and water. I have known bees to forsake hives which once contained fish or some other oily substance. The empty hives, during winter, should be in some place where they can be kept from dirt, particularly from mice and rats. When bees swarm and light on the limbs of trees, they should not be shaken off violently, but the hive should be put near them, or the limbs sawed off.

The next object of attention is to take up the honey without destroying the bees.

The old method of killing the bees to get the

honey, is a very bad one—it can be easily avoided about the first of July, or as soon as the bees begin to lie idle in the front of the hive; take a hive of the same dimensions as the one they are in, and bore in the top of it as many holes as you can, about an inch in diameter—raise (near the dusk of the evening,) the hive that contains the bees—put it over the one that has the holes. The bees will immediately descend into the lower one, and fill it with honey. If the hive is fixed according to the above directions, they will go out and enter the same hole that they did when filling the first one; and thus they will not be disturbed in the least. But when the hole is made in the side of the hive itself, you are under the necessity of stopping it up, and making them pass through one with which they have not been acquainted. In the fall after the bees have done collecting honey, take off the top hive, and turn it bottom upwards, place the edge of it near the entry hole, and by thumping it a little the bees will immediately leave it and enter the other.—Take a piece of board of the proper size and screw it in over the holes. By this method you get a hive full of honey, and a sufficiency in the other for the bees to live on during the winter.—Unless the bees have a second hive to fill, they are in a good season almost entirely idle after July, for want of room to store their honey.

By this method of management, bees are rendered very profitable. Two years ago I bought a swarm of bees on a limb of a tree for \$3.25.—From this one I have 5 others, which independently of the honey they have produced, I value at 25 dollars—and should the three following seasons prove favorable, I shall from this one hive, have bees enough to support my family. From one hive of bees I can generally get two others every year. At a moderate calculation, I shall have in 3 years 60 hives, and should the season be favorable, I shall have one hundred. When my number of hives is sufficiently increased, each one will every season produce honey to the amount of seven and a half dollars.—*Long Island Journal of Philosophy.*

The Acorn.—If an acorn be suspended by a piece of thread within half an inch of the surface of some water contained in a hyacinth glass, and so permitted to remain without being disturbed, it will, in a few months, burst and throw a root into the water, and shoot upwards its straight and tapering stem, with beautiful little green leaves. A young oak tree growing in this way on the mantle shelf of a room is a very elegant and interesting object. I have seen several oak trees, and also a chesnut tree, thus growing; but all of them, however, have died after a few months, probably owing to the water not being changed sufficiently often to afford them the necessary quantity of nourishment for the matter contained in it.—*Gardener's Gazette.*

Pork.—Jefferson Cooledge, Esq. of Livermore, brought into this market—on Saturday last—six round hogs all of his own fattening, weight as follows, 320, 366, 379, 384, 400, 447, total 2296 lbs., for which he obtained 11 cts. per lb., \$252, 56.—They were all small boned and well fattened.—*Halloway (Maine) Cultivator.*

[From the Genesee Farmer.]

MANAGEMENT OF SHEEP.

MR. TUCKER—I propose to furnish your readers with a few chapters on Sheep Husbandry. I shall endeavor to accomplish the matter frankly, to the best of my feeble ability, and without flourish. Notwithstanding the obligations I am under to you for your kindness in publishing my sentiments in a series of essays on the subject of protection of sheep, &c., in the last volume of the Farmer, yet I shall offer no apology for again intruding myself. The subject is an important one, and if in my progress I should repeat briefly some of the important facts which my own experience has furnished me in support of the benefits to be derived from protection of sheep, I hope none will find fault;—my motive will be found in a desire to promote the interest of my fellow farmers, and humanity towards that most interesting and necessary domestic animal, sheep. Repetition in toto, however, of all I have said in favor of protection, would indeed harm none; especially those who still neglect it. You very well know that important truths need to be often enforced. The fall of a solitary drop of water upon the rock makes no impression; but thousands of repetitions will; and so it would seem necessary in regard to the above subject. Nothing short of repetition upon repetition will cause farmers to turn from the beaten tracks of their grandfathers—remove inveterate prejudices, and produce conviction that their interest will be promoted by it. What an argument in favor of protection is the storm, which is now, (28th Jan.) and has been raging for the last two days! What conviction it would strike in every farmer could they see the contrast in the condition of flocks which are exposed entirely without shelter, and my own, at this very time. A roaring storm like this is worth more than all the arguments that ever was penned.

When I went to my four flocks of lambs this morning for foddering, what a pleasure it afforded me to see the little fellows bound out of their warm quarters with the life and elasticity of deer! some frisking like so many romping girls and boys when let out of school; every one erect—backs as straight as a candle, and not, as Ben Rogers says, “drawn in, and kinked up like a Frenchman’s bow knot.” If I received no other remuneration for the expense of protecting all my sheep than the pleasure it affords of thinking upon their comfortable situation, at such a time as this, it would be ample.

But as I design this as a sort of introductory essay, permit me to ramble a little.

Pray, why is it that your numerous correspondents contribute so seldom, and so little on the important subject of sheep husbandry? We have hundreds of articles informing us of the best modes of cultivating every crop, from wheat down to white beans; of the treatment of horses, cattle and hogs; the best and cheapest modes of fattening; the diseases peculiar to each, and the various recipes for restoring health; every information, in short, necessary to promote the welfare of the animal, and conduce to the greatest profit of the farmer. Last year I lost two sheep of a disease entirely unknown to me, and I believe not to be found in the catalogue peculiar to sheep.

At one time, I purposed to draft a description of it, and forward it to you, with the query to your readers—what is the name, and what the antidote. But on reflection, such is the general indifference towards the interesting animal, I was convinced it would be useless; that it was more than probable my queries would be past by like the idle wind. But peradventure it had been a cow, afflicted with a disease which would have caused her to carry her tail horizontally, and scued round so as to form something like an angle with her body, my word for it, an hundred pens would have been ready to tell me of the inducing cause of the disease, and the appropriate remedy. Witness the turn out when hoof-ail was raging. Now, sir, I objected not to all that. On the contrary, although I never had any of my cattle attacked with that disease, yet I eagerly read each and every article which appeared on the subject; but the effect was “confusion worse confounded;” such were the conflicting opinions relative to its origin, and the various remedies proposed. But, in passing, although ergot is apparently the cause, yet I am not entirely satisfied that it is; enough so, however, to deter me from feeding hay to my cattle to which the poison is attached.

Do your correspondents, as well as the great mass of farmers suppose that the art of sheep husbandry has attained perfection in this country? that enough is known already in reference to management, in every particular, with a view to the greatest profit? If so, never was there greater blindness and error. So far from this being the fact, I beg leave to say, from my limited knowledge and observation, it is yet in its infancy. The time is coming, however, in my humble opinion, when we of the north will be able to grow wool as well as any part of the world, and furnish it at as low a rate; when as a source of profit and revenue, it will be second only to wheat. But that day will be distant unless farmers awaken to the subject; not until sheep husbandry is far better understood than it now is.

Let us look into the magnitude which wool growing has already attained in this great country of ours;—brought into being, as it were, and fostered by the effects of the great American system—protection to our manufactures when in their infant stages; but now grown into full men, and needing no legislative props; based upon the rock of nature, energetic enterprise, and setting foreign competition at defiance.

From a work on the subject of “Wool Growing and Manufacturing,” compiled by C. Benton & S. T. Barry, and published something more than a year since, we are enabled to know the number of sheep in fourteen of the states, and are distributed as follows:

Maine,	622,619	New York,	4,299,878
New Hampshire,	465,179	Pennsylvania,	1,714,640
Vermont,	1,099,011	Delaware,	150,000
Massachusetts,	373,322	Maryland,	275,000
Rhode Island,	81,613	Virginia,	1,000,000
Connecticut,	255,169	Ohio,	1,711,200
New Jersey,	250,000	Kentucky,	600,000

Making a total of 12,897,638

It is estimated that the average yield of wool per head is $3\frac{1}{2}$ pounds—although I think it too high—which would make an aggregate product of nearly forty-two millions of pounds. The average price paid for wool from 1827 to 1836 inclusive, was 50 cents; this probably is correct,

as one of the compilers of the above work was a purchaser of the article. It is fair to presume that the number of sheep in this state is now about 4,500,000, which at $3\frac{1}{2}$ lbs. per head, would make 15,750,000 lbs.; and as the average worth per pound is, or will be by the next clip, 50 cents, the worth of the whole is seven millions eight hundred and seventy-five thousand dollars. As it requires one pound of well washed wool—that is washed upon the sheep’s back—to make one yard of fulled cloth, three-fourths of a yard wide, and as the cost of manufacturing a yard is equivalent to the cost of the raw material, and the worth, with a fair profit for the manufacturer would be \$1.35, the result is, a product of over nineteen millions of dollars. Add to this from three hundred to five hundred thousand sheep which are annually sold for slaughtering in our principal markets in this state, and what a mighty interest has the growing of sheep become! Want of space will compel me here to suspend.

L. A. M.

Lansing, Tompkins co., N. Y.

THE HOOF-AIL.

MR. TUCKER—Having had some experience in treating the disease in cattle commonly called the hoof-ail, I have concluded to suggest to my brother farmers a few thoughts on the subject. And first, it is generally believed that the disease is caused by taking into the system, the ergot that grows on the June grass, which no doubt is true; but some do not believe this, and for this class of persons I have been persuaded to make the following remarks:—It is said by them that the disease has appeared among cattle that have been fed with nothing but straw, roots and provender, having been fed with no hay through the winter. In answer to this, I would say, our wheat fields have yielded a beautiful crop of this worthless grass, for two years past, and it has been most bountifully loaded with ergot, and though when threshed it is all separated from the stalk, yet it remains either in the chaff or in the headings or screenings; the screenings are usually ground with coarse grain and fed for provender: the chaff is commonly thrown into the stack with the straw, or in a pen to be fed out as occasion requires, and not unfrequently used instead of cut straw, and thus the most effectual method is taken, to compel our stock to eat that which is most offensive to them, as well as destructive. I would warn every farmer against feeding either the chaff or the screenings, though the straw may be safely fed, if it has been threshed with a machine.

I will here add a few remarks on the symptoms and its remedy. If the ergot is in the hay, your stock will be very wasteful; if milch cows, they will soon shrink in their milk; the next is immoderate thirst, which is evidence of a high fever. (I owned a pair of oxen last spring, that would drink twenty-four pails of water in one day.) Soon after these symptoms, they will begin to shake their hind feet, laying down and getting up frequently, showing evident signs of pain; in three or four days after these symptoms, their ankles will begin to swell; in the course of three weeks, if the weather has been very cold, their hinder feet will have become cracked entirely round and will come off: (the poor creature will keep a good appetite the whole time;) but if it

weather is warm, suppuration will take place within the hoof, and in the course of five or six weeks the hoof only will come off, and will be replaced by a new one when grown out. The only cause of difference is that in the first case, the feet have been frozen, which takes place much more easily than when in health.

REMEDY.

The farmer should be very watchful to discover the first symptoms. As soon as he makes the discovery, he should take for an ox, two ounces of saltpetre dissolved in a pail of water, and let him drink it; for a cow two-thirds as much, and for young stock in proportion and repeat half the dose every day, until the fever abates. If the feet have swollen, bleeding is necessary, which is done as follows: Take a rope five feet long, with a button at one end and loop at the other; such as are used by some to fasten their cattle in the stable; pass it round the fore and hind foot twisting or rolling it together in the middle between the feet; then place the head under the belly of the animal, press hard against it, lifting at the same time hard upon the rope, and in an instant the animal is on his side; fasten his feet, apply a sharp knife between the claws of the foot, cut at least an inch deep through the heel nearly up to the dew claws; take a pint of blood from each foot, but if he should not succeed in obtaining so much blood, saw off the point of the toe transversely on the inside, as it will not injure or disfigure the hoof as much as to cut it square off, besides the pith lies much nearer the inside than the point.

When all this is accomplished, take an ointment, which however should have been prepared before hand, composed of six pounds of lard, three of verdigris, and a pint of tar; the verdigris, must be rolled in six or eight thicknesses of wet paper and bake it in a stove or under the ashes, about twenty-five minutes, or until it is soft; then pulverize it, put it into the melted tar and lard, stir it till cold; apply this ointment to the wound, bind it up with strong bandages and keep it dry and clean; and to conclude, if his object is to save his stock, he should feed nothing more that contains the ergot.

JACOB SUTPHIN.

Sweden, Monroe co., Dec. 1888.

Hooshier Enterprise.—Indiana, one of the newest of our States is now making a canal four hundred and forty four miles long. This great work, the Wabash canal, is to reach from Manhattan, at the mouth of the Maumee river, to Terre Haute, on the Wabash, three hundred and ten miles; thence by a cross cut, twenty four miles to Central Canal, and down the southern section of that, one hundred and ten miles to Evansville, on the Ohio river, in the southwestern part of Indiana, making a total distance of four hundred and forty four miles. The summit level about two hundred feet above lake Erie is at Fort Wayne. Upwards of one hundred miles west of Wayne, is now ready for navigation, and the whole will be completed by October, 1889.—*Morning Star*.

What one Silk Grower has done.—Mr. Timothy Smith, of Amherst raised last season 156 pounds of Cocoons. He also grew upon an acre

and a half of land, 16,000 Mulberry trees, from which he fed 60,000 Silk worms. He also raised 8000 Canton and Manilla Multicaulis trees from roots, cuttings and layers, which afforded food for 15,000 worms, and yielded 38 pounds of cocoons. He, in addition, raised 30,000 Canton Mulberry trees from seed, the kind of plant from which the Chinese feed their worms. Our Amherst friends appear efficient and zealous in promoting the silk business. They have organized a Society and applied to the legislature for an act of incorporation. They have begun right, and now go ahead.—*Northampton Courier*.

A noble Cow.—The U. S. (Philadelphia) Gazette says Mr. John Kenworthy of Oxford, brought to that office last week eighteen pounds of excellent butter, made from the milk given in seven days by one cow.

BADEN CORN.—Mr. Smith of Carthage, Tennessee, writes to the editor of the Nashville Banner full and corroborative testimony of the great productiveness of Baden Corn, and deems it the best variety in America—on good land, well tilled, yielding 20 barrels to the acre.

MORUS MULTICAULIS.

The mulberry fever has not subsided—the public pulse is strong and active, and hundreds that we see have a high flush from the repletion of last summer. Will there come a cold stage, and collapse and asphyxia follow? So say some of our professional friends, smelling of their ivory headed canes, and looking oracular—"There is danger—the patient cannot stand it long—look at the Merino sheep epidemic, and remember its fatal operations."

We do remember that epidemic—we remember the extraordinary prices given for Merinos, for the purpose of increasing the flocks, when we had few or no manufactories to use the wool. Much money was lost by giving \$1500 for a Merino, but the breed of sheep was immensely improved, and the country is now deriving the advantages consequent upon that premature spasmodic action. (We find it difficult to get clear of the professional terms.)

Our country since 1807 and '8 has become a manufacturing country, and if any one will take a piece of muslin from a Lowell factory now, and compare it with a roll of "homespun cotton cloth," such as people made, and sold, and wore in 1810, he will understand the transition from one condition to another; and if he will carry his views from cotton to silk, and from the jenny to the throstle, keeping in his remembrance the advance in manufactures previously noticed, he will see what is to be expected from the progress of the silk business, when the attention of the community is properly drawn to the subject, the energies of the people directed to its prosecution, and the means and appliances of the manufacturers are multiplied to the extent necessary to give importance to any one establishment.

But, says one, a dollar a piece for little twigs, which will produce each from ten to twenty of its like in a year, is a high price, and leads to a profit, which will defeat itself by the very cupidity which it will excite, and the consequent rush which will be made to the business.

Now we think we discover in all this the very

reverse of what some others fear. The price given for a twig of the *morus multicaulis* is, we confess, great; that is, great with reference to the price of any other twig, and also with reference to its exceeding fecundity, because people will say, that if they will multiply so fast, the price must come down. Exactly that; and as they do multiply, so rapidly, the growers may well afford to let the price come down. He who gives one dollar for a twig, and in one year raises therefrom sixteen twigs, will make one hundred per cent. (labor and rent excepted) upon his investment, if he should sell his produce at an eleven penny bit a piece, or $87\frac{1}{2}$ per cent. discount. But the fever is not in raising mulberry trees—that is secondary—the fever is for manufacturing silk, and that manufacture cannot be hoped for to any extent, until many, many thousands of *morus multicaulis* trees have produced their fifteen shoots apiece. The demand for trees is great, because hitherto, and that for only one year, the produce has been confined to a few of the eastern states. The west ask for the trees.—Every country will be seeking that means of giving value to land otherwise unproductive, and of employing children and cripples, who, without that means, would be idle and profitless.

The *morus multicaulis* trees cannot of course increase their present prices, but they can be cultivated with profit, even with an enormous deduction, and then their leaves will be used to feed the worms, and silk will be prepared for the throstle, the loom and the warehouse.—*U. S. Gazette*.

From the Cultivator.

CORN CROP.

Port-Byron, Nov. 8, 1888.

JUDGE BUEL.—Sir—As I have been a constant reader of your valuable paper, the Cultivator, from its commencement, and think I have received much instruction and profit by it, I take the liberty to state to you some facts, that I think may be for the encouragement of some farmers.

Some time in March last, I commenced drawing manure from the barn-yard with two boys and a pair of steers, for the purpose of making them handy; the most of the time we used a horse before them. One of the boys lives with me, the other I hired at \$5 per month. We drew the manure on a clover ley of three years' standing, about three acres.—We put on the whole, 150 common wagon loads, spread it as even as we could, then ploughed, turned it over smooth, rolled and dragged it well, and planted the 11th and 12th of May, with Robbins' drill-barrow; planted what we call the 12 rowed yellow corn, but some ears have 20 rows, and from 10 to 15 inches long. Aimed to have the rows $3\frac{1}{2}$ ft. apart, hills from $1\frac{1}{2}$ to 2 ft; from 2 to 3 kernels in a hill; rows north and south. I soaked the seed first planted in warm water, with a little saltpetre in it. The drill did not work well; I then took the dry seed and planted the remainder of it, which generally came up well; but before I knew it, the crows and worms had devoured a great deal of it. I planted it over, and part of it the third time, with the little golden corn.—It nearly all stood finely. I went through it three times with a horse and cultivator; hoed it well the first time, was not quite so particular the next. I think it the best piece of corn that I ever saw in the state.

Sometime the fore part of September, we cut it up at the roots, and stooked it up, but did not husk any until 15th October. It turned out so well, and was so sound, that I thought I would measure an acre, and see how much was on it. So we took the August No. of the Cultivator, the square and a rope measuring two roods long, went to the field and measured an acre, according to the rule laid down in said number; we measured the wagon box, or first load, 24 baskets full, holding almost $1\frac{1}{2}$ bushels each; we had on the acre 169 baskets, or seven loads and one basket. We took one basket out of the heap, just as it came, and shelled it, and it weighed $37\frac{1}{2}$ lbs.—We husked a load more, and Mr. Cronkhite, one of my hands, thought the corn was still better; we then measured another acre as accurate as possible in the same way, 12 rood 3 feet by 13 rood $2\frac{1}{2}$ feet; we husked off of that 166 baskets, or seven loads, wanting two baskets; we shelled one basket as before, and it weighed $39\frac{1}{2}$ lbs. of shelled corn; the corn was husked and thrown down, the wagon going round to gather; shook down the corn, so that the loads might have been a little larger, and the corn rather sounder, as there was not so much damage done on the second acre by crows, &c.—Thus you see, the first acre had on it 112 bushels $23\frac{1}{2}$ lbs. of shelled corn; the second had 118 bushels 28 lbs. or $118\frac{1}{2}$ bushels; the second acre had on it eight loads of pumpkins; the stalks are well saved, and are excellent fodder. I sowed turnip seed on the whole piece, but the corn and pumpkin vines so covered the ground, that the turnips are worth but little; a few bushels grew to good size since the corn was cut.

EXPENSE OF CROP.

10 days with team and boys at manure,	\$10 00
5 days with young man and team do.	7 50
Parts of days ploughing, perhaps 5,	7 50
1 day with drag at 12s.	1 50
1 day planting at 6s	1 75
1st hoeing, went through with horse and cultivator, $3\frac{1}{2}$ days, with 2 men and 2 boys, worth,	5 37
2d hoeing, 2 men and 2 boys $2\frac{1}{2}$ days each,	3 75
3d hoeing, 3 men and 2 boys 2 days each,	4 75
$4\frac{1}{2}$ days cutting up, with a man and boy,	3 94

\$46 35

One-third of the above, is $3\frac{1}{2}$ days husking 1 acre with 2 men and a boy,	\$15 35
	5 25

Whole expense of one acre,	\$20 60
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VALUE OF CROP.

118 $\frac{1}{2}$ bushels of corn from an acre, at 6s. 6d. amounts to	\$96 31
8 loads of pumpkins, worth	8 00
Stalks would sell quick at	4 00

\$108 31

Deduct expenses,	20 60
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Nett profit of one acre,	\$87 71
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I am yours, with great respect,
JOSEPH F. OSBURN.

Mentz, Nov. 13th, 1838.

This may certify, that I helped raise the said corn, or tend it, and measure, husk, shell and weigh it, and believe to be true to the best of my knowledge.

JOHN HADDEN.

This may certify, that I helped measure the 2d acre as above, and husk it, and believe the above statement to be true.

ABRAM KELLS.

P. O. Port-Byron, town of Mentz, }
Cayuga county, 17th Nov. 1838. }

I am personally acquainted with Mr. Joseph F. Osburn, and have no hesitation in saying that his statement contained within, is in all respects true; and further, that any statement in agriculture coming from him may be relied on

HORACE PERKINS, P. M. & J. P.

Labor Saving soap.—Mr. Gibbs—I herewith send you a Recipe for making the Labor Saving Soap (so called) it is an excellent article, for washing, and a saving of labor.

The Recipes for making, have been sold in this place from 5 to \$10—and the soap for 7 cents per pound; but can be manufactured for about 2 cents. If you see fit, you may publish it for the benefit of the public.

Take two pounds Sal Soda.
two pounds yellow bar soap.
ten quarts of water.

Cut the soap in thin slices and boil all together two hours—then strain through a cloth, let it cool, and it is fit for use.

Directions for using the Soap.—Put the clothes in soak the night before you wash—and to every pail of water in which you boil the clothes add about one pound of soap—the clothes will need no rubbing, merely rinse them out and they will be perfectly clean and white.

Great Falls, N. H. Octo. 4, 1838.

Cure for frozen limbs. Dissolve from a quarter to half pound of allum in a gallon of warm water, immerse the feet or hands in it when frozen, for ten or fifteen minutes, and a cure will be effected. A gentleman of this town informs us that having frozen his feet not long since he tried the above remedy with complete success.

Yankee Farmer.

Long Yarns.—It is stated in Mr. Baines's History of the Cotton Manufacture, that the manufacture of cotton thread has arrived at such a state of perfection, that "350 hanks to the pound have been produced, each hank measuring 840 yards, and the whole amounting to 167 miles."

This is a pretty long thread: but Mr. Murray, in a pamphlet published in England, on the *Pormium Tenax*, or New Zealand flax has furnished a much longer thread than the above. He says there have been specimens of linen thread, the value of which has exceeded its weight in gold; and there is to be seen at Valenciennes, in France, two pounds weight of flaxen thread, intended for the finest specimens of French lace, valued at 250 pounds sterling, and the length of thread is 2,390, 800 yards, or about 452 miles, making the length of thread from one pound of flax about 226 miles.—*London paper.*

LARGE HOGS.

The Middletown Sentinel gives the following specimen of Connecticut Pork:

FAT HOGS.—Capt. Joel Hall, of Chatham, killed two Hogs on the 10th Dec. about 14 months old, which weighed, when dressed, one 424, and the other 428 lbs.

A LARGE HOG.—Mr. Frederick Miller, of the same place, killed a Hog, on the 21st Dec., of about the same age, which weighed, when dressed, 518 lbs.!

And the Bridgeport Farmer boasts as follows: **NEW MILFORD OUTDONE.**—The Litchfield Enquirer recently challenged the production of a lot of "equal to nine raised in New Milford, the aggregate of which was 3649 lbs.; average 405—weight of largest 560.

We have before us a slip of paper from Messrs. G. & E. Thompson, of this city, containing the weight of 10 hogs, raised and recently slaughtered by them, which take the shine entirely from the New Milforders. Their aggregate weight is 4690 lbs. average 468: weight of largest 633; next largest 556. Weight of smallest 401; next smallest 410.

Hurra for Bridgeport! Beat it who can!

[Why, we can beat it and not half try.—Connecticut can't begin. Mr. Henry S. Marshall, of Hyde Park, slaughtered a hog last season that was ahead of any thing above, if our recollection serves us right, for we have lost the memorandum we took of the weight. At any rate, one was brought to this village last week, that clear takes the shine, off of Bridgeport, notwithstanding its "hurrah." It was 20 months old, and was fatted by Mr. David D. Burger, of Clinton, in this county. It weighed when dressed 682 lbs., or with all the fat 710 lbs. Mr. B. is ahead of all. Chatham, New Milford, or other places must try again.

Poughkeepsie Tel.

For the culture of the vine, three different modes of manufacturing have been tried, viz: Spreading it as in a cornfield, placing it at the foot of the vine, or by dissolving it in water, in the proportion of one pound to a gallon. This last mode has been found most successful. It has also been preferred to the other methods, both for vegetable and fruit trees." *New York Farmer*

Siberian Wheat. A farmer of Holden has raised seventeen bushels of Siberian wheat from one bushel of seed, planted on about half an acre of ground. This is a very good yield for last season, and better than any yield in that neighborhood. Farmers in the vicinity who planted the common varieties, 3 bushels to an acre, fell far short of this amount. This seems to be a strong circumstance in favor of the Siberian wheat.—*New-England Farmer*,

Woman. As the dew lies longest and produces most fertility in the shade so woman in the shade of domestic retirement sheds around her path richer and more permanent blessings than man, who is more exposed to the glare and observation of public life. This the humble and retired often do more valuable benefit to society than the noisy and bustling satellites of earth, whose very light of unconcealed enjoyment deteriorates and parches up the moral soil it flows over.

MOLAND'S IMPROVED SILK-SPINNER.
The attention of Silk Manufacturers is invited to the recent invention of an improved Silk Spinner, by Mr. Harrison Holland of this town, for which he has obtained letters patent. It is thought to possess many advantages over any machine now in use for the same purpose. By its peculiar construction, it can be moved by hand, steam or water power,—and doubles, twists and spins the silk at one operation. For family use, or persons wishing to manufacture silk in a small way, it is undoubtedly the best invention in use, while it is equally well adapted for factories on the most extensive scale.
A machine in full operation may be seen, or for a more particular description of it, reference may be had to a Circular published by the subscribers, which can be obtained by any one upon application either to
**HARRISON HOLLAND, or
STODDARD & LATHROP**
Northampton, Mass. Feb. 27. mh 5 6t

AGRICULTURAL IMPLEMENTS.
THE Subscriber acknowledges with gratitude the liberal patronage he has received from the public since the establishment of his Repository in 1825.—During this long period he has studied successfully his own interest by identifying them with the interest of his customers in being prompt and faithful in the execution of their orders.
His present facilities of manufacturing agricultural implements, are not surpassed by any other establishment in this country, he can therefore afford them on as reasonable terms as any other person for the same quality of work. His present stock of implements are extensive both in quality and variety, to which he would invite the attention of those who wish to purchase.
A liberal discount will be made to all cash purchasers, and to those who purchase to sell again.
The following names are some of his leading articles viz: His **PATENT CYLINDRICAL STRAW CUTTERS**, wood and iron frames, but all with his patent double eccentric feeders, with or without extra Knives, prices varying from \$33 to \$110, subject to cash discount, he challenges the world to produce a better machine for cutting long forage, Myer's **WHEAT FAN** and **ELLIOTT'S PATENT HORIZONTAL WHEAT FANS**, both a very superior article. Fox & Borland's **PATENT THRESHING MACHINES** and Martineau's **PATENT HORSE POWERS**, also superior articles — A great variety of **PLOUGHS**, wrought and cast Shares, of all sizes and prices; Gideon Davis's improved **PLOUGHS**, of Davis's own make of Patterns, which are sufficiently known to the public not to require commendation; 100 **CORN CULTIVATORS**, also expanding **CULTIVATORS**, both iron and wood frames, and new plan; **TOBACCO CULTIVATORS**.
F. H. Smith's **PATENT LIME SPREADERS**, the utility of which has been made known to the public; together with a general assortment of **FARMING IMPLEMENTS**; **PLOUGH CASTINGS** of every description and superior quality kept constantly on hand at retail or by the ton; also, **MACHINE** and other **CASTINGS** furnished at short notice and on reasonable terms, his iron Foundry being furnished with the best materials and experienced workmen with ample machinery running by steam power for turning and fitting up machinery.
ALSO—Constantly on hand D. Landreth's superior **GARDEN SEEDS**;—In store **POTATOES** and common **SEED OATS**, **TIMOTHY** and **HERDS SEEDS** all of superior quality.—All orders will be promptly attended to.
JONATHAN S. EASTMAN,
Farmers' Repository, Pratt street,
Near the Baltimore & Ohio Rail Road Depot.
CHINESE MULBERRY TREES.
American Silk Agency, No. 95, Walnut st. Philadelphia
The subscriber having opened a permanent Agency for the purchase and sale of all articles connected with the culture and manufacture of Silk in the United States, offers for sale all the different varieties of **MULBERRY TREES**, suitable for raising the **SILK WORM**; viz: **Morus Multicaulis** Alpinese, **Brussa**, **Multicaulis** Seedlings **Morus Expansa**, **Multicaulis** Cuttings, Improved Italian Trees, &c. Also, Cuttings from **Norton's Virginia Seedlings**, and **Cunningham's Prince Edward GRAPE VINES**. These vines produce an abundant crop of fruit, warranted not to rot or mildew and are fine for the table, and capable of yielding the finest wines.
S. C. CLEVELAND, Agent.

BRITISH GARDEN SEEDS, &c. &c.
ROBERT SINCLAIR, JR. & CO.
ARE JUST OPENING a superior lot of **GARDEN** and **European FIELD SEEDS**, received by the several late arrivals from Europe and from their Seed Gardens near this city. The principal Seeds received and for sale, are viz:—
1100 pounds **EARLY CABBAGE** Seeds consisting principally of Early York, Bullock's-heart, Emperor and Flat Battersea.
600 pounds **LATE CABBAGE SEEDS**—the Flat Dutch, Drum head and Globe Savoy are included in this lot, raised under our inspection and are particularly fine.
700 pounds London Scarlet short top **RADISH**,—early, round, long White, Yellow Turnip and Spanish **RADISH SEED**.
8 casks **BET SEED**, of several Dark Red Garden sorts. Yellow and White Sugar and Mangelwurzels Beet Seed.
800 pounds Rutabaga, Hybrid and other **TURNIP SEED**.
16 casks early and marrowfat **PEAS**, in prime order. Also, London Cauliflower and Brocoli Seed, Cross and Cabbage Lettuce, Tomato, Squash, Scotch Kale, Parsnip Seed, Carrot several kinds, Melons, Cucumber, Spinach, Early Corn, bunch and pole Beans, English Windsor Beans, &c.
23 casks English and Italian Ray Grass, Scotch field Peas and Beans, Potato Oats weighing 44 lbs per bushel. Spring Vetches, White Clover, Lucern English Lawn Grass, early round and kidney Potatoes.
In store.—Italian Spring Wheat, Spring Barley, Kentucky Blue Grass, Baden and Twin Corn, Orchard, Herds and Meadow Oat Grass Seed, Common Red Sapling Cloverseed, and every other variety American field Seed.
For sale as usual.—**AGRICULTURAL IMPLEMENTS** and **TOOLS** of every description, **BOOKS** on Cultivation and management of stocks.
Orders for **TREES** and **PLANTS**, supplied at the shortest notice. feb 12 w4w

FOR SALE,
A valuable **FARM** of prime soil, on the Western Run in Baltimore county, about two miles north west of the 14th mile stone of the Baltimore and York turnpike road, and at the same distance from the depot of the Baltimore and Susquehanna rail road, at Cockey's tavern, in a rich, highly cultivated and healthy tract of country.
This farm contains from 260 to 270 acres, having a full proportion in wood, much of which is building timber, peculiarly valuable in that neighborhood; is in the best state of cultivation; a considerable part in productive timothy meadow, and the residue of the arable land, not in grain, is well set in clover, the whole under good fencing, laid off into convenient fields, each of which is well watered. The farm has a large quarry of excellent building stone. There are on the premises an apple orchard of select fruit trees, which seldom fail to bear abundantly; a valuable mill seat on the Western Run, with a race already dug. There is no location in the country more favorable for a grist mill, having the advantage of a rich and thickly settled neighborhood, and a good public road leading thence to the turnpike road. Buildings substantial and convenient, being a **STONE DWELLING**, and kitchen of two stories; a large stone Swiss barn, with cedar roof and extensive stabling below; large hay house and stable for cattle; stone milk house near the dwelling, with a spring of fine never failing water, with other out-houses. On the country road near the mill-seat a good house and shop for a mechanic, under rent to a good tenant. It is well known the lands on the Western Run are in every respect equal, if not superior to any in the county. Adjoining or near are the lands of Col. N. Bosley, Daniel Bosley, Thos. Matthews and others. The water power, with about 20 acres of land, is so situated that they may be detached and sold separately, without injury to the rest of the farm for agricultural purposes. Terms of sale will be liberal. Apply to
NATHANIEL CHILDS,
on the premises, or to
WILLIAM J. WARD,
oc 23 tf Fayette, near Calvert st. Baltimore.
Printing, executed at the Farmer & Gardener office, at short notice.

SPLENDID BLOODED STOCK FOR SALE.
The proprietor of Covington farm will dispose of the following fine bulls on reasonable terms, viz.
One bull two and a half years old.
One do. six months old.
of the improved **Durham short horn breed**; the dam of the first was got by the celebrated bull Bolivar; for size, form and beauty they are not surpassed by any animal in the state.
Three **Devon Bulls**, one of which is seven years old next spring, and the largest Devon in the State. The Devons are from the stock of the late Wm. Patterson, and of undoubted purity.
Two half Devon bulls.
Two bulls half improved Durham short horn, and half Devon.
One splendid bull, a cross of the Bakewell, Alderney and Devon.
One bull, half Alderney and half Holstein.
These fine animals may be seen at Covington farm, near Petersville, Frederick county, Md. on application to James L. Hawkins, Baltimore, or to
se 11 f **FREDERICK FERT. Manger.**

CHILDS' PATENT SHAVING OR SHARPENING POWDERS.
As tranquility of mind is essential to the convalescence of the body, so will these powders prove from the usefulness and relief they afford to those who have to shave daily, and particularly dyspeptic invalids, whose enfeebled nerves are rendered more feeble by the least agitation.— Their use I strongly urge, and warrant their effect in producing feelings as agreeable and as soothing as an anodyne; and to those in health, instead of an irksome undertaking, the operation becomes a pleasurable pastime. I deem it my duty to recommend to the public this invaluable article, which may be had at the store of the inventor, No. 88 South Street, Bowly's Wharf:—James Gould, No. 136, Market Street:—or at *Canfield & Brother's*, South-East corner of Baltimore and Charles sts. X
Feb 19 4t*

FRESH SUPPLY OF FIELD AND GARDEN SEEDS,
BY THOMAS DENNY, Ellicott near Pratt street, Baltimore, who has just received general supply of **GARDEN SEEDS**, the growth of 1833, part of which was raised by the first Seedsmen of this country, and a part imported, all of which will be sold wholesale and retail, upon the best terms, such as
GARDEN PEAS; Early and Late assorted Cabbage; Cauliflowers; Radish; Lettuce; Cucumber; Parsnip; Carrot; Onion; Rutabaga Turnip; Parsnip seed of all kinds, Garden Beets assorted; French Sugar Beet; Mangel Wurtzell, &c. &c. Also **FIELD SEEDS**, such as Early Sugar, Early White, Sioux, Chin or Tree Corn; Dutton, Baden and Twin Corn; Red Clover; Luzerne and White Dutch Clover; Timothy; Orchard; Herds; Millet, Tall Meadow Oats; superior Seed Oats; Spring Wheat; Spring Rye; Spring Barley; Seed Buckwheat; blue and Kentucky Lawn Grass, &c. &c.
Also **GARDEN TOOLS**, assorted sizes, and late improved patterns; Bird Seed of all kinds, Double Dahlias; Hyacinths, and Polyanthus, assorted, and selected for beauty and richness of colours, together with choice Flower Seed, assorted; Mulberry Trees; Fruit and Ornamental Trees; Silk worm Eggs; &c.; Agricultural Books; Silk Manuals; &c. Rohan Potatoes—Early Seedling do. &c. All orders by mail or otherwise will meet with early attention and dispatch, on the best terms for cash.
ja29 8t

FOR RENT,
A lot of ground, containing 12 acres. It is situated near the York Road, a short distance this side the first tollgate. It has on it two comfortable frame dwelling houses, and extensive and convenient arrangements for cows and horses, with a pump of excellent water. The soil and situation have been said by persons engaged in the mulberry and silk business, to be admirably suited to that branch of agriculture. The advertiser would give the land and improvements, to a person who might wish to embark in that business, for a reasonable share of the profits, the renter to be at all expense, and give his personal attention. The stabling, &c., could at a trifling expense be converted into cocoeneries. Apply at the office of the Farmer and Gardener. fe 6 3t

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every MONDAY

	PER	FROM	TO
BEANS, white field,.....	bushel.	2 50	
CATTLE, on the hoof,.....	100lbs	9 00	10 00
CORN, yellow.....	bushel	—	—
White.....	"	—	—
COTTON, Virginia,.....	pound	15	15½
North Carolina,.....	"	13½	14½
Upland,.....	"	14½	15
Louisiana—Alabama.....	"	15	16
FEATHERS,.....	pound.	53	
FLAXSEED,.....	bushel.	1 56	1 62
FLOUR & MEAL—Best wh. wh't fam.	barrel.	10 00	10 50
Do. do. baker's.....	"	—	—
SuperHow. st. from stores	"	7 87	8 00
" wagon price,	"	7 75	
City Mills, super.....	"	—	8 12
extra.....	"	8 37	8 50
Susquehanna,.....	"	—	—
Rye,.....	"	5 50	
Kiln-dried Meal, in hhd.	hhd.	18 50	
do. in bbls.	bbl.	4 25	
GRASS SEEDS, wholes. red Clover,	bushel.	14 00	15 00
Kentucky blue.....	"	—	—
Timothy (herds of the north)	"	3 00	
Orchard,.....	"	2 00	2 50
Tall meadow Oat,.....	"	—	3 00
Herds, or red top,.....	"	—	1 00
HAY, in bulk,.....	ton.	12 00	16 00
HEMP, country, dew rotted,.....	pound.	6	7
" water rotted,.....	"	7	
HOGS, on the hoof,.....	100lb.	9 37	9 50
Slaughtered,.....	"	9 00	9 50
HOPS—first sort,.....	pound.	20	
second,.....	"	18	
refuse,.....	"	—	—
LIME,.....	bushel.	32	33
MUSTARD SEED, Domestic, —; blk.	"	3 50	4 00
OATS,.....	"	45	
PEAS, red eye,.....	bushel.	—	1 12
Black eye,.....	"	1 00	1 12
Lady,.....	"	—	—
PLASTER PARIS, in the stone, cargo,	ton.	4 25	
Ground,.....	barrel.	1 50	
PALMA CHRISTA BEAN,.....	bushel.	—	—
RAGS,.....	pound.	3	4
RYE,.....	bushel.	100	105
Susquehanna,.....	"	—	none
TOBACCO, crop, common,.....	100lbs	5 00	5 50
" brown and red,.....	"	6 00	6 50
" fine red,.....	"	9 00	12 00
" wrappery, suitable	"	—	—
for segars,.....	"	10 00	20 00
" yellow and red,.....	"	10 00	14 00
" good yellow,.....	"	10 00	15 00
" fine yellow,.....	"	12 00	15 00
Seconds, as in quality,.....	"	6 00	
" ground leaf,.....	"	7 00	9 00
Virginia,.....	"	6 00	10 00
Rappahannock,.....	"	—	—
Kentucky,.....	"	6 00	8 00
WHEAT, white,.....	bushel.	—	—
Red, best.....	"	1 70	1 75
Maryland.....	"	—	—
WHISKEY, 1st pf. in bbls.....	gallon.	44	45
" in hhd.....	"	41	
" wagon price,.....	bbls	—	41
WAGON FREIGHTS, to Pittsburgh,.....	100lbs	3 00	—
To Wheeling,.....	"	3 00	—
WOOL, Prime & Saxon Fleeces,.....	pound.	50 to 55	
Full Merino,.....	"	45 50	
Three fourths Merino,.....	"	40 45	
One half do.....	"	35 40	
Common & one fourth Meri.....	"	35 40	
Pulled,.....	"	30 33	
POTATOES, 60 to 70 cts. a bushel.			

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,.....	barrel.	—	—
BACON, ham, new, Balt. cured....	pound.	13	15
Shoulders,.... do.....	"	12½	13
Middlings,.... do.....	"	12½	—
Assorted, country,.....	"	10½	—
BUTTER, printed, in lbs. & half lbs.	"	31	50
Roll,.....	"	25	31½
CIDER,.....	barrel.	1 75	2 00
CALVES, three to six weeks old....	each.	5 00	6 00
COWS, new milch,.....	"	30 00	40 00
Dry,.....	"	—	—
CORN MEAL, for family use,.....	100lbs.	2 00	2 12
CHOP RYE,.....	"	—	1 60
EGGS,.....	dozen.	25	—
FISH, Shad, No. 1, Susquehanna,	barrel.	6 00	6 25
No. 2,.....	"	—	—
Herrings, salted, No. 1,.....	"	6 00	6 25
Mackerel, No. 1, ————No. 2	"	11 75	13 50
No. 3,.....	"	7 50	—
Cod, salted,.....	cwt.	3 25	3 37½
LARD,.....	pound.	12	13½

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

U. S. Bank,.....	par	VIRGINIA.
Branch at Baltimore,.....	do	Farmers Bank of Virgi. par
Other Branches,.....	do	Bank of Virginia,..... do
MARYLAND.		Branch at Fredericksburg, do
Banks in Baltimore,.....	par	Petersburg,..... do
Hagerstown,.....	o	Norfolk,..... do
Frederick,.....	do	Winchester,..... do
Westminster,.....	do	Lynchburg,..... do
Farmers' Bank of Mary'd, do		Danville,..... do
Do. payable at Easton,.....	do	Bank of Valley, Winch. par
Salisbury,.....	1 per ct. dis.	Branch at Romney,.... par
Cumberland,.....	par	Do. Charlestown,.... par
Millington,.....	do	Do. Leesburg,..... par
DISTRICT.		Wheeling Banks,.... 2½
Washington,.....		Ohio Banks, generally 3
Georgetown,.....	Banks, ½ p.c.	New Jersey Banks gen. 3
Alexandria,.....		New York City,..... par
PENNSYLVANIA.		New York State,.... do a½
Philadelphia,.....	par	Massachusetts,..... 1½a2
Chambersburg,.....	½	Connecticut,..... 1½a2
Gettysburg,.....	do	New Hampshire,.... 1½a2
Pittsburg,.....	2½	Maine,..... 1½a2
York,.....	½	Rhode Island,.... 1½a2
Other Pennsylvania Bks. 2		North Carolina,.... 3a2½
Delaware, [under \$5].... 4		South Carolina,.... 4a5
Do. [over 5]..... 1½		Georgia,..... 5a5½
Michigan Banks,..... 10		New Orleans,..... 7a8
Canadian do..... 10		

MORUS MULTICAULIS.

The subscriber offers for sale 16,000 Mulberry Trees and 200,000 cuttings, warranted to be the genuine Morus Multicaulis. The trees are remarkably healthy and will be delivered at such time as will suit the convenience of purchasers. Orders (for not less than 100 trees) from the country will be promptly attended to.

fe26 M. POTTER,
46 South Charles street.

AGRICULTURAL IMPLEMENTS.

John T. Durning & Co. encouraged by the favors shown them in the past year, are determined to offer no article to their friends but such as they can warrant, made of the very best materials, finished in a superior manner, of the newest patterns, and at liberal prices.

From John T. D.'s long experience in the manufacture of these articles he flatter himself that he can give entire satisfaction to those farmers, Commission Merchants, Captains and others who may favor him with their orders. J. T. D. & Co. wish especially to recommend a lately improved and superior "Wheat Fan" as being admirably adapted to clean effectually and fast—price \$25.—any new machine coming into market may be obtained to order.

All orders for field and garden seeds, of the best kinds and fresh, will also be furnished at our Agricultural Establishment, upon the usual terms, by Thomas Denny, seedsman, Grant St. Baltimore, rear of Messrs. Dinsmore & Kyle.

fe 26

A SETTER FOR SALE.

The subscriber has for sale a thorough bred Setter, eleven months old. He has been but little hunted but gives indication of making a first rate dog. He comes of a strain remarkable for their fine performance in the field, and is a beautiful rich brown white in the breast and face. His price is \$30. All applications by letter must be post paid. fe 26 EDWARD. P. ROBERTS.

SEEDS, PLANTS, FLOWERS.



The subscriber offers for sale at his establishment a fresh supply of GARDEN SEEDS of the very best quality; those that cannot be grown in this country he imports direct from Europe from a source that can be relied on.

Besides a large collection of GREENHOUSE, hardy ORNAMENTAL TREES and Shrubs, Herbaceous Plants, and Bulbous Roots, and a choice collection of the very finest double Dahlias offered for sale, all on reasonable terms, wholesale or retail.

Also on hand a few bushels of ITALIAN RYE GRASS, with 100 bush. ITALIAN SPRING WHEAT, of the true kind. All orders for Fruit and Ornamental Trees, or any thing appertaining to his establishment will be strictly attended to, by JOHN FEAST,

Florist & Seedsman, cor. of Lexington and Pine sts. ja 22 tf Baltimore.

CLAIRMOUNT NURSERY, NEAR BALTIMORE.

The subscriber offers for sale a general assortment of grafted FRUIT TREES, as usual—amongst them are 20,000 thrifty Peach Trees, of good size for transplanting, of the most choice varieties; Catawba, Isabella and other choice Grape Plants, two and three years old, at reduced prices by the hundred; English Gooseberry, Currant, Raspberry and Strawberry Plants. Also, many thousands of Ornamental Trees, suitable for planting in streets and lawns, 15 to 15 feet high, of the following sorts—Chinese Alantus, or Tree of Heaven; Silver leaf and Tulip Poplar; Silverleaf Sugar, red flowering and Ashel & Maple; English, Dutch and Scotch Elm, European and American Linden; Common and Pinkflowering Locust; Catalpa; Paper Mulberry, and the much admired European Larch; White and Red Flowering Horse Chestnut; English and other Walnut, Macclusa or Osage Orange—the four latter named trees are of smaller size. Several thousand Evergreen Trees of the following kinds—Balsam Fir, Arbour Vitea, American and from India; Weymouth Pine; American or Black Spruce; dwarf and tree Box; Roses and other Ornamental Shrubs, Vines and Creepers, large Plants: giant Asparagus; Hop and Horse Radish Roots.

Form any other articles and further particulars, see printed and priced Catalogues, which will be sent by mail gratis to persons requesting them.

MORUS MULTICAULIS MULBERRY.

The subscriber has for sale, a few thousand TREES and CUTTINGS of his own raising, at regular prices; having raised this tree for seven years, and having the advantage of much experience in raising this valuable tree, purchasers may rely on getting a genuine article in a perfect state of preservation.

Also, 10,000 MORUS ALBA, or Italian White Mulberry Trees, 2 to 6 feet high, at \$2 to \$10 per hundred, and less per thousand.

Orders sent by mail or otherwise will be promptly and carefully executed, and forwarded to any part of the U. S. when more convenient. Orders may also be left with R. Sinclair & Co., Light street, Baltimore.

feb 8 law4t ROBT. SINCLAIR

SILK AGENCY,

Corner of E. and 7th streets, Washington City, D. C.

The subscriber having commenced an Agency for the purchase and sale of SILK MULBERRY TREES, and all articles connected with the growing of Silk, offers for sale the following varieties of Mulberry Trees at Baltimore prices, viz. Multicaulis, Alpine, Broussa, White Italian and Canton; also Mammoth White Silk Worm's Eggs, warranted to be of superior quality. All the recent publications on silk growing for sale, and subscriptions received for the various periodicals devoted to that subject. no 20 J. F. CALLAN.

THE AMERICAN FARMER.

The proprietors of this paper have a few complete sets of this work on hand, which they will dispose of at the reduced price of \$50 a set.

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THE FARMER & GARDENER

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, E. P. ROBERTS AND SAMUEL SANDS—EDITED BY E. P. ROBERTS.

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BALTIMORE, MD. MARCH 12, 1839.

Vol. V.

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BALTIMORE: TUESDAY, MARCH 12, 1839.

Mr. Russell Comstock.—This gentleman has placed in our possession copies of a number of letters which he received from certain members of the United States' Senate, to whom he confided the secret of his discoveries in the cure and prevention of fruit and other trees and vegetables from injuries by disease and from insects. We perceive by the tenor of these letters, that most of these gentlemen think well of the principles of Mr. Comstock's discovery, and deem them philosophical in their nature. Of ourself, not having been initiated into the "secrets of his prison-house," we can say nothing of the merits of his discovery, or of its intrinsic value; but if we may be allowed to indulge in a supposition, we would remark, that if he does possess the means of certain cure and prevention of these diseases which make such sad havoc upon the health and lives of apple, pear, peach and other delicate fruit trees, as also the remedy to secure the grain crops from the ravages of disease and insects—we say, if he possesses this knowledge, and will communicate it to the American people, he deserves very *solid remuneration*. When we say this, however, we would not be understood as meaning to convey the idea that we think him entitled to the *price* he asks; for we understand he demands a sum equivalent to *half a dime* per capita, upon the whole number of persons comprising the population of the United States. However valuable his information may be,—and if it is what he represents it to be, we are willing to admit its transcendent importance, in an individual and national point of view, we cannot conceive any single individual to be entitled to so immense a sum for such a purpose from government. Half a dime per head, would amount to \$750,000, an amount greatly exceeding our appreciation of what we would consider a liberal compensation, and we think by making a stipula-

tion as to price, he weakens his chances of success; and this we regret the more, as it jeopardizes the possibility of the discovery ever becoming what it ought to be—*public property*—as without its being so, its benefits must always be too limited to prove as serviceable as is required by the interests of the community. Our *pear, peach, apricot, apple, plum, quince*, and other fruit trees, have for years been so subject to disease as to greatly lessen their value, and curtail their respective products. Indeed, the maturing of the fruit of several of these species is so precarious as to render it difficult to calculate with any degree of certainty as to their bearing at all, and whether each season would not terminate their existence. Such being the fact, the comfort of his species would seem to appeal to Mr. Comstock to make an abatement of the sum he claims, as every one owes something to patriotism, and to that community of interest which as a member of the great American family he enjoys. We, therefore, hope that he will see the propriety of so graduating the *price* of his discovery as to make it an object with the *people* to second his appeal to Government for remuneration; for unless the people do come to his rescue, we have very little hope that his application will ever result in any thing but disappointment, as the acts of all representative governments, must necessarily be the reflections of those of the constituent body.

The Durhams as Milkers.—We sold to Major Haines, of Marietta, Pennsylvania, two years ago, a full blooded Durham heifer, and we were highly gratified to learn from him the other day, that with her *first* calf she gave *six gallons* of milk a day; that she calved in mid-winter, and continued to give nearly the same quantity of milk until he parted with her in the beginning of the following summer. She was the grand-daughter of Emperor, and we doubt not will prove as distinguished for her deep milking qualities as her grandsire was for his ponderous weight; he it will be recollected attained such immense size as to be rendered incapable of locomotion at an early period of his life, and was thus rendered prematurely useless for all the softer purposes of his nature.

The Silk Bounty Law.—We sincerely hope that the legislature will not adjourn without passing the law now before them granting bounties on silk, as we conscientiously believe that the interest of the State is identified with the success of the silk culture. Independently of the obvious policy of the measure upon abstract principles, it appears to us as the neighboring States have provided premiums, it would be fatal to Maryland longer to delay following such good examples, because the omission to do so would inevitably drive those who may be disposed to engage in the business to leave us for those states where a more fostering feeling prevailed, and it is obvious that we can neither spare our citizens, their capital, industry or enterprise.

The second number of the American Silk Company's Journal has made its appearance, and proves by its excellence that it is destined to be a valuable auxiliary to the cause of the silk culture. We sincerely wish it success, and bespeak for it a patronage as catholic as the branch of industry it advocates will be of blessings to the country. Should this be the measure of its support, we are sure that the patriotic gentlemen who have given it being will have no cause to complain of the want of a reciprocity of feeling in the American people.

We last fall used a *Virginia bar-share plough*, improved and manufactured by Mr. Mahool of Harford county, and as an act of justice to that ingenious individual will observe that we have never employed an implement of the kind that gave us more entire satisfaction, and we, therefore, unhesitatingly recommend it to the agricultural community. Mr. P'Anson of Cheapside street, is the agent for their sale in Baltimore.

Mulberry Culture.—As the season is now opening, let no one who may contemplate engaging in the growing of mulberries, delay making the necessary preparations. Delays in all things are dangerous; but in nothing more than in the cultivation of mulberries.

Georgia Silk Bounty.—We insert in another

column the law passed by the State of Georgia, granting a bounty on Silk raised in that State, and hope it will excite the legislature of other States to follow the lead so laudably set them by the patriotic legislature of Georgia.

From the Farmer's Cabinet.

OBSERVATIONS ON GRASS SEEDS.

"All flesh is grass."

A very knowing man gave it as his opinion, "that whoever could make two ears of corn, or two blades of grass, to grow upon a spot of ground where only one grew before, would deserve better of mankind, and do more essential service to his country, than the whole race of politicians put together." Now although the mass of noisy politicians, who wish to fatten, not by making grass or corn grow, but by lugging fiercely at the public teat, may incline to controvert this opinion, yet it is presumed that the plain, honest, industrious farmers of our country, who gain a livelihood by close attention to agricultural pursuits will incline to think favorably of it. Being myself a believer in the opinion, has induced me to take up my pen, with a view of pointing out to my friends and neighbors, what may be done this spring towards accomplishing so desirable an object.

It is now universally admitted that neither grass nor grain, or indeed any plant whatever can be produced without seed, and that whenever we wish to produce any particular plant we must sow or plant the proper seed to produce it. In sowing the seeds of the artificial grasses, it should be borne in mind, that you will not have more spears or grass plants than the number of seeds sown, and not even that number, for more or less of them, from various causes will fail to vegetate or be destroyed. If it is desired to have the plants numerous, the seeds must be thickly dispersed; it is true many seed cost more than a few, but then the object being to obtain a full crop of grass this can only be obtained by being liberal in the application of seed; let those who wish only a very moderate return of grass, sow the seed *thin*, *very thin*, and they will accomplish the object; they may have the plants six inches or a foot distant from each other if they are careful to put the seeds far enough apart.

Being desirous of ascertaining the number of seeds of the kinds usually sown which would fill a bushel measure, I recently caused to be accurately weighed the one sixteenth part of an ounce avoirdupois of the kinds designated below, the seeds in each parcel were then carefully counted, from which it was ascertained the number of them contained in a pound, and also the number contained in a bushel, the weight of which was known. The seeds were all perfectly clean, and the best of their kind, being procured of George M. Coates, in Market street, Philadelphia.

Timothy seed rated at 40 lbs. per bushel; the number of seeds contained in a bushel is	60,600,320
Red clover seed, (American) 60 lbs per bushel,	24,084,480
Dutch red clover seed, imported, 60 lbs. per bushel,	16,819,200

Dutch white clover seed imported, 60 lbs. per bushel,	42,929,600
Orchard grass seed, 12 lbs. per bushel,	5,819,368

The imported red Dutch clover seed was considerably larger than the American, and it will be perceived that the latter contains about fifty per cent. more seeds to the bushel than the former, and consequently it would take a bushel and a half of the Dutch seed to furnish as many plants as one bushel of the American.

It has been a very general error amongst our farmers to sow grass seeds too sparingly, thereby leaving much of the ground unoccupied, or filled with weeds, which will inevitably be the case where the soil is fertile, and grass seed has been applied with a parsimonious hand. A very small share of common sense observation, and a little arithmetical calculation will correct this pernicious and impoverishing error. An acre of land contains 4840 square yards, or 43,560 square feet, or if brought to square inches, 6,272,640 spaces, each of one inch square, is equal to one acre. If clover seed is sown evenly at the rate of $7\frac{1}{2}$ lbs. or the eighth of a bushel per acre, it would produce about three million of plants, provided they generally vegetated, which would allow each plant about two square inches of space for its accommodation. But it must be recollected that there is always a considerable loss of seed occasioned by its being imperfectly ripened, from its having been heated, or by its being buried in situations unfavorable to its growth, or other causes, so that ample allowance should always be made to guard against contingencies of every kind. From the data furnished above it will be easy to make a calculation in regard to any of the seeds enumerated, so as to operate as a guide to those who don't desire to give their grass plants more elbow room than may be necessary to promote their proper growth and expansion and the farmers' true and most permanent interest.

AGRICOLA.

[From the Southern Agriculturist.]

PREPARATION OF COTTON SEED FOR PLANTING.

Mr. Editor:—Every cotton planter is aware, that in planting his seed, many of a defective kind are put into the ground. These have enough of vitality in them to sprout, but the plants from them are always defective, and never mature their fruit as well as plants from healthy seed.

To secure healthy seed many planters are at the trouble of selecting their seed one by one, which, though a very good plan, is too tedious for general practice. Their plan is to pick out from among these seed, such as appear full and plump—but this plan sometimes fails, as it is not every seed that appears best that is actually so. With them as with men, appearances deceive. A more simple, more expeditious, and surer plan for selecting good seed, is to procure a large tub. Fill this with salt water (fresh will do,) about half full; into this drop (holding it up as high as the hand can) one or two quarts of cotton seed at a time. All the full and perfect seeds will sink to the bottom of tub, while the defective ones will float on the top of the water. These should be skimmed off with the hand. Continue to

throw in seed after the manner described above, until you have collected as much seed as you want.

If you are ready to plant, the seed may be left in the tub of water during the night—but if the weather be warm, and the land dry, I would not advise doing so, unless the water has been well salted. The salt on the seed is a great help, it will attract moisture to the earth around the seed, and thus cause them to germinate much sooner. If any one wishes to be convinced of this, let him, in dry weather, sprinkle a little salt upon a piece of ground, and examine it the next morning.—While all the earth around will be apparently parched, the salted ground, having attracted moisture during the falling of the night dews, will appear actually wet.

Your obedient servant,

A COTTON PLANTER.

From the Tennessee Farmer.

THE SILK CULTURE IN THE UNITED STATES.

This branch of domestic industry has acquired such a prominence in the public eye, and promises practically to enlist the capital and enterprise of so many of our citizens, that we cannot permit the year to run out without yielding it a more special notice than it has hitherto had at our hands. No longer to be regarded as a doubtful experiment, or visionary speculation, it may indeed claim a most important rank in the agricultural system of the country, and richly deserves the notice and encouragement of all who desire to witness the progressive development of the national resources, and our farther independence of other countries for articles of domestic consumption.

The practicability of the silk enterprise is now very generally admitted by all candid men who have given the subject proper attention. For about 60 years past, silk has been annually produced in the cold ungenial climate of Connecticut, and if valuable varieties of the mulberry will survive the winters of New England, as is actually the fact under certain modes of treatment, and silk be profitably produced there, it may be most rationally argued that the production of this beautiful fabric in the South, with its vastly superior adaptations, is a demonstrated problem—unclouded by scarcely a shade of incertitude.

Yet, with this admission freely made, and notwithstanding the great parade which has existed about the general introduction of the silk culture into this country, and the wonderful exploits of particular silk-growers among us, it must, on the other hand, be confessed that very little has, actually, been accomplished in the production of raw material or fabric, and the business is yet in its extreme infancy, so far as positive results or the national interests are concerned. The statistics of the silk culture in the United States, so far as they have been ascertained, show this fact most clearly—presenting comparatively meagre returns after the busy "note of preparation" which has been so long and so clamorously sounded.

This state of things, however, is most easily accounted for, and has no bearing whatever upon the practicability of the silk culture, or its vast intrinsic importance to the United States. Very many persons have invested money in mulberry

plantations with the sincere intention of feeding the worm and manufacturing silk. But finding such great demand for, and such high profits in the sale of mulberry cuttings and trees, they have almost invariably consented to postpone their ultimate object for the present tempting advantages of this traffic. Accordingly, a vast deal of money—indeed handsome fortunes, have already been realized in the sale of mulberry plants—in which speculation, we believe, *all* (perhaps without exception,) who have had trees or cuttings to sell, have engaged, and while human cupidity remains unchanged, and men continue to prefer present profits to remote gains for themselves or the country, we may expect this state of things to exist until the markets shall be completely glutted, and then we may hope to see the manufacture of silk actually progress, and this article become, as we do think it is destined to be, a staple production of this country. As the mulberry trees propagate in a ratio so geometrically rapid, we may indulge the hope that a few more seasons will suffice to supply the immediate wants of all. And, indeed, we cannot perceive any thing very seriously to censure in this species of traffic, where no fraud is committed, [unless it be the exorbitant profits so coolly pocketed,] as it is widely disseminating the means of growing silk, and meeting the wishes of the many individuals who desire going into the business, and who are willing to pay the prices demanded. It may, therefore, we think, without irony, be called “a fair transaction”—more especially, as the ultimate hopes held out to silk-growers are not, probably, destined to disappointment.

Like some mighty river, the roar of whose waters waxes louder and more loud as it sweeps onward to the ocean, the Silk [or at least Mulberry,] mania has steadily strengthened itself, until in some parts of the country it has attained a very high state of excitement, which still does not seem to be its ultimatum. We might here give expression to the amusement we have felt in witnessing the paroxysms of its symptoms—even the clear, cool and grave head infected almost to vertigo—some who had hitherto stood somewhat aloof from the atmosphere of the epidemic, and rather sneered at its prevalence, themselves its now excited subjects—the sectional contentions for the Mulberry purchasers—the wagers, so gallantly tendered upon the trees of the North against the trees of the South, &c. &c. &c. But the subject is a serious and important one, nationally; and the lover of his country who will turn to the officially reported amount of our importations and consumption of foreign silk, will soon forget the ludicrous point of this excitement in the earnest hope that it may eventuate in the general adoption and permanent success of this highly promising and important enterprise. And as it *always* should be with every good government, so, *in this case*, the national and individual interests are identical. Scarcely a resident family of village or country in the whole land, but might find it personally profitable to produce silk according to its means and preparation. And this preparation is, by no means, formidable. The labor is light, pleasant and healthful, and its appliances unexpensive. Many of the beautiful silks of China, are said to be wrought by individual families, with fixtures of the simplest, cheapest,

and even rudest construction. But these individual producers are vastly numerous; and hence the large aggregate of their manufactures of this fabric. The tendency of things in our own country would seem, now, to point to this result. A gentleman from Virginia, who recently visited the East, for the purpose of personal enquiry into the state of the silk culture there, says that the silk companies are doing comparatively little, besides puffing their establishments, and that to witness the practical details of the business, you must go into private families, where alone the actual culture is making any considerable progress. This state of things is by no means discouraging. One of the strongest inducements to the adaption of the silk culture in the United States is its extremely happy adaptation to the capacities, means and interests of individual families, and especially of farmers throughout the States. Very little preparation and expense are necessary to enable almost any household [especially in the country] to engage in the business, on a scale commensurate with its means and circumstances. And bringing into employment the supernumerary and otherwise unavailable hands in the family, and thus interfering, very immaterially, with the main work on the farm, its general adoption by our agricultural population, would at once develop new and handsome resources for them, while the aggregate of their labors would add materially to the wealth and independence of the nation.

It is a highly attenuated fastidiousness which objects to this enterprise, that its abundant success is a matter of no intrinsic value to our people, and would only minister to an undue luxury, pride and ostentation. It is, no doubt, truly estimated that silk can be produced at a much cheaper rate than cotton—with less toil of man and beast, and far less waste and deterioration of the soil demanded for its culture. As it is certainly a more durable article of apparel than the latter fabric, there exists, therefore, no objection against it but its extreme lustre and beauty—an objection that will lie, with equal force, against the exquisite grace and loveliness of shade, shape and color, with which Providence has seen fit to clothe the flowers and vegetation generally of the garden, field and forest. Like the fruitless effort to fix a standard of taste, it is, indeed, a difficult task to ascertain the precise point, at which the necessities merge with the luxuries of life. In the process of civilization and refinement, the latter imperceptibly and naturally transmute themselves into the former; and as our passions, once indulged, are ever hurrying us to extremes, the bounds of moderation and conscience are, often, soon transcended in the eager rapidity of this fascinating progression. This admitted, we cannot nevertheless, apprehend any great moral disaster in the realization of the prospect (a remote one certainly) when every yeoman in the land shall clothe his family in native silks of the richest texture and most lustrous dyes.

DICTIONARY OF TERMS USED IN AGRICULTURE,

AND IN THE SCIENCES MOST INTIMATELY CONNECTED WITH ITS ADVANCEMENT.

AMONIA. Volatile alkali. It is transparent, colorless gas, of about half the weight of common water, with an exceedingly pungent smell, ex-

tinguishes flame, and is fatal to life. Its old name was ‘spirits of hartshorne.’ To the agriculturists, amonia is particularly interesting from the fact that those substances that contain the most of it, are the most efficient manures, and act with the most certainty and promptness. Amonia is produced from soft or fluid animal substances while in the process of decomposition, and this change is rapid in proportion to the quality of earthy salts they contain. “It is particularly to the developements of ammoniacal gas,” says “Chaptal,” which, combined with gelatine, passes into plants, that we can attribute the wonderful effects produced upon vegetation by certain animal substances.” These substances are the animal manures, the urine, *poudrette*, the bones, horns, hair, &c. The urine of the animal contains in muriates and carbonate of amonia about 20 per cent. besides 11 per cent. of phosphate of lime, and sulphate of potash, or 30 per cent. of the most active manure yet discovered; and the saving and proper distribution of it forms an important item in Flemish husbandry. The larvæ left after the cocoons are reeled in the extensive silk manufactories of France and Italy, are considered invaluable as a manure. Their excellence is owing to the amonia they contain, which in them Chaptal found to exceed in quantity that of any other animal substance.

ANALYSIS. To determine the value of any soil, or to be able to correct any fault in the original constitution, or any deficiency arising from improper cultivation, it is necessary that the nature and proportion of the substances composing it should be understood. In agriculture this examination is termed analysis; and in its simplest, yet still effectual method, may be practiced by every farmer. The implements required, are a pair of scales, accurate to the tenth part of a grain, a crucible; some muriatic acid, and a few small vessels of china or glass.

The earth to be tested by the farmer should be taken from a few inches below the surface, and be an average specimen of the field or the soil to be examined. The quantity to be examined, say 2 or 400 grains, is to be slightly pulverized or well mixed together. Put of this, 200 grains in a crucible, and heat it to 300° of Fahrenheit, or bake it in an oven heated for bread for 15 minutes; cool and weigh. This will show the absorbent power of the soil, and as this is depending mainly on the animal and vegetable matter, if the loss is considerable it is a decisive proof in this respect of fertility. The absorbent power varies from 1 to 12 per cent.

After weighing, heat it again the crucible to a red heat, and until the mass shows no bright or sparkling particles, stirring it with a glass or iron rod; cool and weigh, and the loss will be the animal and vegetable matter in the soil.

Take 200 grains of the dried earth, mix it thoroughly with a gill of water by stirring it for several minutes. Let it stand for three minutes, and turn off the muddy water into another glass. Dry the sediment in the first glass at a high heat, weigh, and it gives the silicia contained in the soil. Let the water turned off settle clear, turn it off, dry at a high heat and weigh; this gives the alumine or clay.

Put into a suitable glass or flask, one-fourth of a gill of muriatic acid and water in equal propor-

tions, and balance the scales carefully. Put into this mixture, 100 grains of the earth, let it stand till all effervescence has ceased, which will sometimes be an hour or more; carefully note the weight required to again balance the scales, and that may be set down as the weight of carbonic gas expelled, say 6 grains. Then as 45 is to 55 so is this weight to that of the base, or the lime. In this case the lime would be $7\frac{1}{2}$ per cent.

To ascertain if earth contains iron, stir the muriatic acid and water with a strip of oak bark, and if iron is present in the liquid the bark will turn dark. To ascertain the quantity, put in prussiate of potash till it no longer forms a blue precipitate, let it settle, heat the deposit to redness, carefully weigh the remainder, which is oxide of iron.

To determine the presence of gypsum, take 400 grains of earth, mix one-third the quantity of powdered charcoal, keep in at a red heat in a crucible for half an hour.—Then boil the earth in a quantity of water for thirty minutes, filter the liquor and expose it for some days in an open vessel. A white deposit will be sulphate of lime, and the weight will determine the proportion.

These processes are all simple, and can be performed by any one. By them we obtain—1st, the absorbent power; 2d, the amount of animal and vegetable matter; 3d, the silica or sand; 4th, the alumine or clay; 5th, the carbonate of lime; 6th, the oxides of iron; and 7th, the gypsum or plaster of paris. The salts exercise a great influence on vegetation; but as they principally depend on the animal and vegetable matter in the soil, and as the determining their qualities and kinds are too difficult for the analysis of the farmer, the processes are omitted. The above ingredients are all that exert a marked influence on the fertility of soils, and on their proper proportion its goodness depends. If soils contain too much silica or gravel, they are porous; and if too much clay, retentive. The last is usually the worst fault, and may be known by the water standing upon it after rains, remaining unsettled for a long time, owing to the clay held in solution. Wheat winter kills on such soils; on calcareous gravel ones rarely. Good soils usually contain from 65 to 75 of silica; from 10 to 16 of alumine; from 4 to 10 of lime, and varying proportions of vegetable matters, animal and mineral salts, &c. The analysis of soils form one of the most decided steps in the improvement of agriculture, as it clearly points out what is wanting to remedy any defect, and give ease of working, and abundance in product. Every farmer should understand the nature and composition of his soils, and at a mere trifle of expense.

ANIMALCULÆ. The microscope has opened to the observation of man a race of beings so small as to be utterly invisible to the naked eye, yet endowed with all the functions of vitality and perfectly organized animals. Some of these are called Infusoriæ, from being always found in water where plants are decaying, and some Diatomæ, but all included under the term animalculæ. They have long been regarded more as objects of mere curiosity than any thing else; but recent discoveries seem to indicate that these minute insects have had an important influence in modifying the crust of the earth, and giving it the character it now possesses. Mountains of

flinty rock in Silicia have been found by Eberberl to be wholly composed of the shells of animalculæ, and in this country masses of remains of the infusoriæ have been found several hundred yards in extent. Unlike the shells of the molusca and testacea, which are lime, the shells of these invisible animals are found to be unchanged by fire, and composed of pure silica. All bodies of long stagnant water, such as those where peat is formed, or bog earth deposited, abounds with infusoriæ, and Prof. Bailey, of West Point, has found at the bottom of peat earth and in it, immense quantities of these minute remains. It is a curious fact that animals invisible in themselves to the eye, should be able in the course of centuries to form mountains, change the face of continents, and exert an influence by no means trifling on the labors and productive industry of man.

ANNUAL. This term is applied to plants that arrive at maturity in a single year and then perish. The stem of annuals is generally a rapid growth, porous, and abounding in the juices necessary to the perfection of the seeds in a single season. The herbage of some planted is annual, while the roots are perennial, or remain from year to year. Maize is an example of a proper annual; the grasses, of perennial roots, with annual herbage.

APHIS. A family of insects that prey extensively on plants, and are endowed with such astonishing power of reproduction, that though insignificant as individuals, they are formidable in their numbers, and in most years occasion more or less loss to the agriculturist. The congregations of aphides consist in spring and summer of apterous and living less individuals, and of nymphæ with undeveloped wings.—They have no mouths, but are provided with beak-like suckers, which they insert into plants, and feed on the juices. Almost every cultivated plant or tree has its peculiar family of aphids; and those trees and shrubs that are wild, or found only in the depths of the forest, cannot claim the exemption. What is called the apple tree louse, is an aphid; and on lifting the scale-like covering, the depredator, and its implement of suction can be seen. Another species infests the tender shoots of grafts, and the thrifty shoots of the apple and other fruit trees, and if allowed to multiply unmolested, produces great injury. The American blight, as it is called in England, or the *adhis hanata* of the entomologist, is a destructive species, when permitted to make a lodgment on the apple, but fortunately the cotton covering in which it is enveloped renders it easy to discover, and thus timely put the fruit grower on his guard. In passing through the Tonnawanda swamp, from Lockport to Batavia, in 1838, the Alder, *glauca*, that lined the road was literally loaded in places with a species of aphid, the long cotton filaments of which, erect in air, seemed to be waved at will, and simultaneously, giving a most singular aspect to the branches on which colonies were planted. The turnip is greatly infested with the aphid, as is the rose, fennel, parsley, and many other plants cultivated for use or ornament. The aphid, while fixed by its sucker to the branch or the leaf, elaborates a sweet honey-like fluid, clear as water, and this is projected at will from two tubes in the hinder part of the body. We have seen in the sunshine, these drops falling like the spray of a

waterfall, from a fruit tree on the leaves of which millions of the aphids were feeding. It is for this substance that colonies of the aphid are so frequently visited by the ant, which drinks the sweet fluid as it is thrown out by the aphid. Soap-suds, and a strong decoction of tobacco, have been deemed most effectual in destroying them, though when a foothold is once obtained, from their rapid multiplication, extermination is difficult.

APIARY. The place or building in which bees are kept, is termed an apiary; and where these industrious insects are kept for profit, or for observation, much care is sometimes taken in this department of domestic management. There is no question that keeping of bees may be made a source of considerable profit, at very little expense, as their food costs nothing, and a residence is provided with the very hive in which they are placed. Moveable apiaries are common in eastern countries; and a long boat, with a hundred swarms of bees on board, accompanied by the owner, may be seen floating down the Danube, the Po, or the Nile, anchoring where materials for honey promise to be abundant; and moving onward when the district is exhausted of its sweets. Among farmers, too little attention is usually paid to the apiary; the hives being left exposed to the storms and cold of winter, and the intense heat of summer, without protection. Bees, like other domesticated creatures, will well repay care and attention.

AQUATIC. Plants that live and flourish in the water are termed aquatic. There are also aquatic animals and birds. All our lakes, rivers and the ocean, furnish specimens of aquatic plants, some of which are of great use and value. A large part of the soda of commerce is obtained from a sea weed, which, drifted ashore, is dried and burned for the soda of the ashes. Hundreds of square miles in the equatorial Atlantic, at some seasons of the year, are covered with this marine vegetation. Some sea weeds, as the algæ, that grow as they float in the water, attain a length of several hundred feet. The rice plant of the East Indies and the Carolinas, is an aquatic plant, and probably contributes as much to human subsistence as any plant on the globe. The wild rice, *Zizania aquatica*, of our northern lakes and rivers is of great service to the native tribes of those regions, feeding the immense quantities of water fowls of all kinds that visit and breed in those inhospitable climes, as well as furnish food to the natives themselves when their usual supplies from other sources fail them. The flags, rushes, and other grasses that grow in the waters of the lakes, or other quiet waters, the pond lily, &c. are further examples of aquatic plants.

ARGILLACEOUS. A term applied to soils in which clay forms a principal ingredient. It was derived from *argil* or clayey, as aluminous from alumina. In agriculture, argillaceous and aluminous are words of the same import, and mean soils or earth in which clay predominates. 'Analysis' shows how the proportion can be determined.

ARTESIAN. A kind of well made by boring through the successive strata of the earth until water is found. This name is derived from Artois in France, where the system of boring was first successfully adopted. By penetrating the rocky crust of earth in this way, the water frequently rises to the surface, and flows a living stream; in

other cases it rises so as to be obtained without difficulty. In this country wells have been bored to the depth of a thousand feet, and those of five hundred to seven hundred are not uncommon. Various products are obtained from the earth in this way. In Albany a valuable mineral spring has been reached by boring. The great quantities of water at the Kenhawa salines are obtained from Artesian wells. Springs of carbonated hydrogen, that burn with a perpetual flame; and immense reservoirs of patroleum, (the Seneca oil of commerce) have been discovered while boring for salt or for fresh water. Artesian wells have been sunk in the deserts between Cairo and Suez, and abundant supplies of water obtained; and wherever the borings have been properly and perseveringly conducted, either in this or foreign countries, water has usually been produced.

ARTICHOKE. Two plants of this name are cultivated for food; the first *Cyanra scolymns*, is chiefly cultivated in Europe for culinary purposes. The part that is eaten is the receptacle of the flower, divested of the unopened florets, and the bristles that separate them. The head thus prepared is boiled plain and eaten with melted butter and pepper, and is deemed wholesome and nutritious. These bottoms, as they are termed, are also made into a variety of dishes, stewed and highly seasoned. The other plant, is the one known as the Jerusalem artichoke, *Helianthus tuberosus*, and is cultivated for the root alone. It is a species of sunflower, grows wild in several parts of South America, and the root is potatoe shaped. The roots are valuable as a food for animals, and are not unpalatable to man. They are found in most of our gardens, an improper place for them, as they are apt to spread, and are somewhat difficult to eradicate. In this country few attempts have been made at their field culture, but those have been profitable. In highly cultivated grounds in England and Holland, they have been found extremely productive, 70 or 80 tons of the roots having been gathered from a single acre.—Their flavor is much like that of the former artichoke, when boiled and prepared for the table, and they are very valuable for feeding hogs and store pigs.

FLOATING PLANT.

Doctor Samuel A. Cartwright, of Natchez, read a lecture before the Mississippi Lyceum, on the 7th ult. on the health-preserving properties of the *grandiflora jessiena*, or floating plant. Part of the lecture is published in the Natchez Free Trader of the 17th ult. and is to be concluded in a subsequent number.—The doctor ascribes to that plant virtues of the most salutary kind, and if he can establish them to the extent in which he says they exist, the floating plant will become a very important material for promoting and restoring health. It is found on the stagnant waters of Lower Louisiana in great quantities, floating on the surface, and wherever it appears, the water of the bayou or pool on which it floats, is more or less clear in proportion to the greater or smaller quantity of the plant. According to Doctor Cartwright the pores of this plant constitute the alembic through which the impurities of the water pass off. The plant is entirely *aquatic*, bears a flower, grows two or

three feet above the surface of the water; the root is several feet in length, lies horizontally on the water, about two inches below the surface. The roots and leaves, says the doctor, form such a dense covering to the water as to constitute a bridge sufficiently strong to enable snakes and smaller animals to pass over the pools in which it grows. The mass is in some places so thick as to offer considerable resistance to a canoe, and they form the stratum of the *prairie tremplant*, the shaking prairie.

The doctor supposes that the growth of this plant is conducive to the health of the region in which it appears; and to support his theory, he adduces the following facts:

1. That it purifies all stagnant water in which it grows.
2. That though he visited the region in which the plant is indigenous, in the hottest season of the year, he found the stagnant waters of the lakes and bayous, inhabited by this plant, as pure to the sight, smell and taste, as if it had just fallen from the clouds. He gives as an example the waters of the Bayou Black, which have a darkish appearance, owing to a chemical affinity between some ferruginous matter in the soil and the oak trees and leaves which have fallen into it, yet the water was free from all disagreeable taste and smell. It contained no green scum, and was as good and palatable as cistern water, except near the Gulf of Mexico, where it was impregnated with salt, and the inhabitants drink no other kind of water. The doctor alleges, that south of the region where the *jessiena grandiflora* grows, in the same kind of alluvial soil, stagnant water of pools and bayous becomes very impure. He infers, therefore, that this aquatic plant consumes or feeds upon those substances which, in other situations, corrupt and vitiate stagnant waters in warm climates.

3. The doctor asserts a fact, which, if well founded, establishes his theory beyond all controversy; the region in which this plant abounds contains more stagnant water and swamps than any other inhabited districts of the same extent in the United States, and yet the inhabitants enjoy a remarkable degree of health and longevity, and are exempt from malarious and miasmatic diseases. The growth of this plant is bounded by the 30th degree of north latitude, and the soil and face of the country on both sides of it are similar, being alluvial, and containing lakes swamps and stagnant water, and covered with nearly the same vegetable productions. The country on the north side is unhealthy, its stagnant waters impure, its inhabitants sickly, and human life of short duration. On the south side of the country, there is a wholesome atmosphere, pure water, healthy and long lived inhabitants.

The doctor adduces the country on the bayou Lafourche to sustain his theory respecting the healthiness produced by the growth of the floating plant, and he says that in the year 1831 a great number of the original settlers were living, who migrated from Nova Scotia before the revolution. The negro population, he says, was very numerous and remarkably healthy and long lived, and the number of persons among the negroes, over a hundred years old, was greater than in all

New England, including its whole population, white and black.

The inhabitants attribute their peculiar healthfulness to the salubrious influence of sea breezes, on soils of the same kind, beyond the region of the *jessiena grandiflora*. Therefore, he says, it is a fair inference that this plant, by consuming the impurities of the stagnant waters, prevents the generation of miasmata and thus acts as a prophylactic against bilious fevers and other miasmatic diseases.

Doctor Cartwright is a man of science and learning, of high character as a physician and of amiable disposition. We are not sufficiently acquainted with the phenomena of natural history to decide upon the merits of his theory. If it be correct, and the facts which he advances seem to leave no doubt on the subject, he has made a discovery of the utmost importance to science—and one which will be extremely useful to the inhabitants of the southern parishes of Louisiana.

N. O. Bee.

An Act to promote the culture of silk in this State.

[Georgia.]

Whereas, it is desirable that the culture of silk should be encouraged within the limits of this State:

Be it therefore enacted by the Senate and House of Representatives of the State of Georgia in General Assembly met, and it is hereby enacted by the authority of the same, That from and after the passage of this act, whenever any persons either individually or collectively shall raise any silk within the limits of this State, he, she, or they, shall be entitled to draw from the State Treasury, a premium of fifty cents, for each and every pound of cocoons, as by him, her or them raised, and ten cents per pound on each pound of good silk, by him, her, or them, reeled from cocoons, so raised, and the persons, so claiming the premium aforesaid, shall first exhibit the cocoons raised, and the silk reeled as aforesaid, to one of the Justices of the Peace, within the county where the same shall have been raised, and the said Justices shall thereupon examine the person or persons claiming the premium as aforesaid, upon his, her, or their oath, or legal affirmation, and shall require the party so claiming the premiums to swear or affirm that the cocoons were raised in the State of Georgia, after the passage of this act, that the premium has not before been claimed by, or paid to any other person for said cocoons or silk; and in relation to all other facts and circumstances, as may, in the opinion of said Justice, be connected with the raising or reeling of the same; and upon such evidence proving satisfactory to his mind, he shall thereupon make out and sign a certificate with his seal thereto affixed: which certificate shall be sufficient authority to his Excellency the Governor, and he is hereby required to receive in his department the same, to draw his warrant upon the State Treasury in favor of the party to whom said certificate is granted for the amount of said premium as per said certificate, to be paid out of any money not otherwise appropriated. This act shall be and continue in full force and effect, for and during the term of ten years, from and after its first passage. All laws

and parts of laws repugnant to this act, be, and the same are hereby repealed.

JOSEPH DAY,

Speaker of the House of Representatives.

CHARLES DOUGHERTY,

President of the Senate.

Assented to, 29th December, 1838.

GEORGE GILMER, Governor.

From the Farmer's Cabinet.

EARTHS AND SOILS.

In the investigation of agricultural subjects, it is necessary that we should as correctly as possible, distinguish earths and soils, and their varieties. The earths important to agriculture, and which form nearly the whole surface of the globe, capable of producing vegetation, are only four, viz: silicious, aluminous, calcareous, and magnesian.

As a full description of all the distinctive characters of these earths could not be embraced within the compass of my contemplated communication, I shall merely mention a few, by which may be understood the effects they necessarily produce in forming a compound best calculated to promote vegetation.

Silicious earth exists in the state of sand. It is composed of very hard particles, which cannot be made coherent by mixing with water. The solidity of the particles of sand renders them impenetrable to water, and their loose arrangement make sand incapable of retaining water. It is also quickly heated by the sun, which adds to the rapidity with which it loses moisture.

Aluminous earth, when dry, adheres to the tongue, absorbs water rapidly and abundantly, and when wet, forms a tough paste, smooth and soapy to the touch. By burning, it becomes very hard; when drying, aluminous earth shrinks greatly, it becomes a mass of hard lumps, separated by cracks and fissures, which become so many little reservoirs of standing water when filled by rains, and remain so when the lumps, by slowly imbibing the water, are distended enough to fill the space occupied before.

Calcareous earth, or carbonate of lime, is calcareous earth combined with carbonic acid, and may be converted into quick lime by heat. Lime is soluble in acids; during the solution the carbonic acid escapes with effervescence. In this manner, the carbonate of lime, or calcareous earth, may not be easily distinguished from silicious and aluminous earths, but from all other combinations of lime. Magnesia earth, like lime, is usually found in combination with carbonic acid: but even in this, its natural state, it exists in such very small quantities in soils, and is found so rarely, that its name is a useless addition to the lists of the earths of agriculture.

All the earths individually, when as pure as they are ever furnished by nature, are entirely barren, nor would any addition of putrescent manures, enable either of the earths to support healthy vegetable life. The mixture of the three earths, in due proportion, will correct the defects of all, and with a sufficiency of animal or vegetable matter a soil is formed. Such is the natural surface of almost all the habitable world, and though the qualities and value of soils, are as various as the proportions of their ingredients, yet they are

mostly so constituted, that no one earthy ingredient is so abundant but that the texture of the soil is mechanically suited to the production of some valuable crop. Some plants require a degree of closeness, and others of openness in the soil, which would cause other plants to decline or perish. As the qualities and value of soils depend on the proportions of their ingredients, and the grand desideratum in agriculture, is to obtain a mixture of the earths, best calculated to produce the greatest variety of the most valuable crops, we can satisfactorily comprehend in what manner that object may be obtained. Silicious and aluminous earths, by their mixture, serve to cure the defects of each other. The open, loose, thirsty and hot nature of sand, being corrected by and correcting in turn the close adhesive and wet qualities of aluminous earth. This curative operation, however, is merely mechanical, and it seems probable that calcareous earth, when in large proportion, also aids the corrective power of the other earths. In addition also to the mechanical effects of calcareous earth, it possesses chymical powers more effectual in altering the texture of soils, and for which a comparatively small quantity is sufficient. The chemical action of calcareous earth, as an ingredient of soils, will be particularly noticed hereafter, when we come to the consideration of the food of plants. From what has been said, it would appear reasonable to class and name soils according to their predominant earthy ingredients, which exert the greatest power, and most strongly mark the character of the soil. The predominant ingredient is not always the most abundant. If the most abundant was considered the predominant ingredient, and gave its name to the soil, then almost every one should be called silicious, as that earth is seldom equalled in quantity, by all the others united. If the earthy parts of a soil were two-thirds silicious, and one-third aluminous earth, the peculiar qualities of the smaller ingredient would predominate over the opposing qualities of the sand, and the mixture would be a tenacious clay. If the same soil had contained only one-twentieth part of calcareous earth, that ingredient would have had more marked effects on the soil, than could have been produced by either doubling or diminishing to half their quantity, the silicious and aluminous earths which formed the great bulk of the soil.—But every farmer can readily discover what are the most marked good or bad qualities of his soil, as evinced under tillage, and those qualities can be easily traced to their predominant ingredients. A silicious, or sandy soil, has such a proportion of silicious earth as to show more of its peculiar properties than of any other ingredient. It would be, more or less, objectionable for its looseness, heat or want of power to retain moisture, and not for toughness, liability to become hard after wet ploughing, or any other quality of aluminous earth. In like manner an aluminous, or clayey soil, would show strongly the faults of aluminous earth, though more than half its bulk might be of silicious earth. Hence every farmer can readily judge of the perfection and of the defects of his soil, which, from a knowledge of the distinctive properties of the earths, he will be enabled to correct by the addition and mechanical mixture of such earth as may appear to be deficient, thereby produce a soil, the best calculated

to promote the growth and perfection of vegetation.

JOSEPH CLOUD.

[From the Charleston Mercury.]

SILK.

Attention is solicited for the following notice copied from the Augusta Constitutionalist. Mr. Olmstead, the gentleman therein mentioned, is now in this city but will leave it to-day. Zealous however, to diffuse information upon the important subject to which he has long given his especial attention, he will attend at Stewart's Carolina Hotel, between the hours of 11 A. M. and 2 P. M. to give the benefit of his experience to all who may call upon him, to inquire into the history of the experiment of the silk culture in Connecticut, which has been attended with such successful results. There is no doubt, from past experience and from the known advantage of climate, that an experiment in making silk which can be followed by even moderate success, so far North as Connecticut, cannot fail with half the attention to succeed entirely in Carolina and other Southern States.

SILK CULTURE.

An interesting article on the Silk culture will be found in this day's paper, taken from the Richmond Enquirer. If that important culture has attracted much attention in the North, certainly in the South, where the climate is better adapted to that branch of agriculture, a greater interest should be taken in its improvement. That the people of the north can raise and manufacture silk to great advantage, we had ocular proof on Tuesday evening last in company with a number of our citizens, at the Eagle and Phoenix Hotel. Mr. Olmstead, a gentleman from East Hartford, Conn., who has devoted much of his attention to the subject, and who is now on a visit to the south, was kind enough to exhibit to us a number of samples of sewing, twist and raw silk, of various colours, which will bear a comparison with any of the same kind imported, and which was raised during the past year, by Mr. J. Manforth. The samples exhibited to us were parts of the product of an eighth of an acre of ground, planted as an experiment. We were informed by Mr. Olmstead that the trees from which the worms were fed, were planted between the 15th and 20th of May last, in rows of 3½ feet apart, on land cultivated the preceding year, and of a sandy loam; ploughed up about the middle of September, at the rate of 30,000 an hour. He commenced gathering the leaves and feeding about the 10th of July. The quantity of leaves gathered amounted to 1194 lbs. The quantity of silk worms fed \$2,000; and the quantity of cocoons produced, nine bushels; yielding nine pounds of silk and floss 1 lb. About 5000 of the worms were fed on 180 lbs. of leaves, and the product of them was two bushels of cocoons, or two pounds of silk. This establishes the fact that 90 lbs. of leaves of the *Morus Multicaulis* are sufficient to produce one pound of silk. He commenced plucking the leaves when the trees were four and five feet high, leaving four leaves at the top of the tree. He thinks the product of the eighth of an acre would have been more than 1200 lbs of leaves; but being short of worms he

had use for no more than 1164 lbs. If we take the estimate of 1200 lbs. of leaves to the eighth of an acre, as a basis, the product of an acre would be over 100 lbs. silk, but allowing even 190 lbs. to the acre, the silk, as manufactured in sewing silk, being worth \$10 per pound, the produce of one acre of land would be \$1000, besides multiplying the trees for market.

[From the Southern Agriculturist.]

A SHORT ACCOUNT OF A MACHINE FOR RAISING WATER FROM DEEP WELLS.

Mr. Editor.—For the benefit of such of your readers, whose situations are such as to require deep wells to obtain water, I have transcribed the following easy method of drawing water from such wells, which I met with in looking over the Annual Register for the year 1783, should you think it worthy a place in the Southern Agriculturist.

This machine is said to be the invention of a seafaring man, who took the hint from observing the great quantity of water which every rope brought on board with it, that had been drawn through the water—a circumstance that could escape no person's observation who has been much on board ships; but which, like many other things, that pass daily before our eyes, had never been applied to any useful purpose. The application is as simple as the principle.

A good wheel, about three feet diameter, is fixed on an axis, which turns horizontally over the well, and an endless rope, of a sufficient length, to reach into the water in the well, passes over it in the groove. On the same axis a wrench is fixed at one end to turn it by; and, at the other end, another wheel, loaded with lead, which acts as a fly, to increase the velocity. On turning the wheel, each part of the rope, as it goes to the bottom, passes through the water; and on account of the above mentioned property, the water adheres to, and is brought up by it to the top, where it is discharged from the rope into a cistern, placed to receive it, by the pressure of the rope upon the wheel, in passing over it—and so great is the simplicity and effect of this machine, that we have been told by a very excellent mechanic who has seen it, that notwithstanding the well is near two hundred feet deep, he turned the machine with one hand, so as to raise water sufficient to fill a pipe, the diameter of the aperture of which appeared to him equal to the diameter of the rope that raised it. This, at least, is certain; the well had long been disused before this machine was erected over it, on account of the difficulty they found in raising the water out of it.

Respectfully your's, WM. LOGAN.

CHINESE MULBERRY TREES.

American Silk Agency, No. 95, Walnut st. Philadelphia
The subscriber having opened a permanent Agency for the purchase and sale of all articles connected with the culture and manufacture of Silk in the United States, offers for sale all the different varieties of MULBERRY TREES, suitable for raising the SILK WORM; viz: Morus Multicaulis Alpinese, Brussa Multicaulis Seedlings, Morus Expansa, Multicaulis Cuttings, Improved Italian Trees, &c. Also, Cuttings from Norton's Virginia Seedlings, and Cunningham's Prince Edward GRAPE VINES. These vines produce an abundant crop of fruit, warranted not to rot or mildew and are fine for the table, and capable of yielding the finest wines.

S. C. CLEVELAND, Agent.

BY R. LEMMON & CO.

LARGE SALE OF MORUS MULTICAULIS TREES.

On WEDNESDAY, the 27th instant, at 11 o'clock, at the Auction Stores, on Frederick street wharf, 20,000 MORUS MULTICAULIS TREES.—These trees are in the very best possible state of preservation, having been tended and raised with great care. They are all securely packed in boxes, and the number of buds in each marked thereon. The counting having been done by sworn counters, every reliance can be placed in their correctness.

Terms of sale.—For all purchases under \$50, cash—all over that sum, four and six months credit will be given, to be secured by good notes with endorsers to be approved of. mh 11

DAIRY FARM WANTED.

A small FARM suitable for a Dairy, with a Spring House, and moderately good improvements, containing 30 to 80 acres of land, situated within two miles to six miles of the city is wanted for Rent, and early possession given. It is necessary that there should be a sufficient quantity of land in grass or good pasturage, for from 12 to 18 head of Cattle. A liberal rent would be given for a property suitable for the purposes wanted. Address box No. 61 Post Office, Baltimore, with description, location, name and terms. mh 12

SILK AGENCY,

Corner of E. and 7th streets, Washington City, D. C.

The subscriber having commenced an Agency for the purchase and sale of SILK MULBERRY TREES, and all articles connected with the growing of Silk, offers for sale the following varieties of Mulberry Trees at Baltimore prices, viz. Multicaulis, Alpine, Broussa, White Italian and Canton; also Mammoth White Silk Worm's Eggs, warranted to be of superior quality. All the recent publications on silk growing for sale, and subscriptions received for the various periodicals devoted to that subject. no 20 J. F. CALLAN.

MORUS MULTICAULIS.

The subscriber offers for sale 16,000 Mulberry Trees and 200,000 cuttings, warranted to be the genuine Morus Multicaulis. The trees are remarkably healthy and will be delivered at such time as will suit the convenience of purchasers. Orders (for not less than 100 trees) from the country will be promptly attended to.

M. POTTER,

fe26

46 South Charles street.

FOR SALE,

A valuable FARM of prime soil, on the Western Run in Baltimore county, about two miles north west of the 14th mile stone of the Baltimore and York turnpike road, and at the same distance from the depot of the Baltimore and Susquehanna rail road, at Cockey's tavern, in a rich, highly cultivated and healthy tract of country.

This farm contains from 260 to 270 acres, having a full proportion in wood, much of which is building timber, peculiarly valuable in that neighborhood; is in the best state of cultivation; a considerable part in productive timothy meadow, and the residue of the arable land, not in grain, is well set in clover, the whole under good fencing, laid off into convenient fields, each of which is well watered. The farm has a large quarry of excellent building stone. There are on the premises an apple orchard of select fruit trees, which seldom fail to bear abundantly; a valuable mill seat on the Western Run, with a race already dug. There is no location in the country more favorable for a grist mill, having the advantage of a rich and thickly settled neighborhood, and a good public road leading thence to the turnpike road. Buildings substantial and convenient, being a STONE DWELLING, and kitchen of two stories; a large stone SWITZER barn, with cedar roof and extensive stabling below; large hay house and stable for cattle; stone milk house near the dwelling, with a spring of fine never failing water, with other out-houses. On the country road near the mill-seat a good house and shop for a mechanic, under rent to a good tenant. It is well known the lands on the Western Run are in every respect equal, if not superior to any in the county. Adjoining or near are the lands of Col. N. Bosley, Daniel Bosley, Thos. Matthews and others. The water power, with about 20 acres of land, is so situated that they may be detached and sold separately, without injury to the rest of the farm for agricultural purposes. Terms of sale will be liberal. Apply to

NATHANIEL CHILDS,
on the premises, or to
WILLIAM J. WARD,

POTATOES.

1,500 bushels POTATOES, from Portland, Maine, in good order for sale in parcels to suit purchasers by

WILLIAM CHILD,

mh 12 3t§ No. 88 South Street, Bowly's wharf.

SPLENDID BLOODED STOCK FOR SALE.

The proprietor of Covington farm will dispose of the following fine bulls on reasonable terms, viz.

One bull two and a half years old.

One do. six months old.

of the improved Durham short horn breed; the dam of the first was got by the celebrated bull Bolivar; for size, form and beauty they are not surpassed by any animal in the state.

Three Devon Bulls, one of which is seven years old next spring, and the largest Devon in the State. The Devons are from the stock of the late Wm. Patterson, and of undoubted purity.

Two half Devon bulls.

Two bulls half improved Durham short horn, and half Devon.

One splendid bull, a cross of the Bakewell, Alderney and Devon.

One bull, half Alderney and half Holstein.

These fine animals may be seen at Covington farm, near Petersville, Frederick county, Md. on application to James L. Hawkins, Baltimore, or to se 11 f FREDERICK FLETCHER, Manger.

CHILDS' PATENT SHAVING OR SHARPENING POWDERS.

As tranquility of mind is essential to the convalescence of the body, so will these powders prove from the usefulness and relief they afford to those who have to shave daily, and particularly dyspeptic invalids, whose enfeebled nerves are rendered more feeble by the least agitation.— Their use I strongly urge, and warrant their effect in producing feelings as agreeable and as soothing as an anodyne; and to those in health, instead of an irksome undertaking, the operation becomes a pleasurable pastime. I deem it my duty to recommend to the public this invaluable article, which may be had at the store of the inventor, No. 88 South Street, Bowly's Wharf.—James Gould, No. 136, Market Street:—or at Canfield & Brother's, South-East corner of Baltimore and Charles sts. X

Feb 19

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MOLAND'S IMPROVED SILK SPINNER.

The attention of Silk Manufacturers is invited to the recent invention of an improved Silk Spinner, by Mr. Harrison Holland of this town, for which he has obtained letters patent. It is thought to possess many advantages over any machine now in use for the same purpose. By its peculiar construction, it can be moved by hand, steam or water power,—and doubles, twists and spins the silk at one operation. For family use, or persons wishing to manufacture silk in a small way, it is undoubtedly the best invention in use, while it is equally well adapted for factories on the most extensive scale.

A machine in full operation may be seen, or for a more particular description of it, reference may be had to a Circular published by the subscribers, which can be obtained by any one upon application either to

HARRISON HOLLAND, or
STODDARD & LATHROP

Northampton, Mass. Feb. 27.

mh 5 6t

AGRICULTURAL IMPLEMENTS.

John T. Durling & Co. encouraged by the favors shown them in the past year, are determined to offer no article to their friends but such as they can warrant, made of the very best materials, finished in a superior manner, of the newest patterns, and at liberal prices.

From John T. D.'s long experience in the manufacture of these articles he flatters himself that he can give entire satisfaction to those farmers, Commission Merchants, Captains and others who may favor him with their orders.

J. T. D. & Co. wish especially to recommend a lately improved and superior "Wheat Fan" as being admirably adapted to clean effectually and fast—price \$25.—any new machine coming into market may be obtained to order.

All orders for field and garden seeds, of the best kinds and fresh, will also be furnished at our Agricultural Establishment, upon the usual terms, by Thomas Denny, seedsman, Grant St. Baltimore, rear of Messrs. Dinsmore & Kyle. fe 26

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every MONDAY

	PER	FROM	TO
BEANS, white field,	bushel.	2 50	
CATTLE, or the hoof,	100lbs	9 00	10 00
CORN, yellow	bushel	—	—
White	—	—	—
COTTON, Virginia,	pound	15	15½
North Carolina,	—	13½	14½
Upland,	—	14½	15
Louisiana — Alabama	—	15	16
FEATHERS,	pound.	53	—
FLAXSEED,	bushel.	1 56	1 62
FLOUR & MEAL—Best wh. wh't fam.	barrel.	10 00	10 50
Do. do. baker's	—	—	—
SuperHow. st. from stores	—	7 87	8 00
“ wagon price,	—	7 75	—
City Mills, super	—	—	8 12
“ extra	—	8 37	8 50
Susquehanna,	—	—	—
Rye,	—	5 50	—
Kiln-dried Meal, in hhd. hhd.	—	18 50	—
do. in bbls. bbl.	—	4 25	—
GRASS SEEDS, wholes. red Clover, bushel.	—	14 00	15 00
Kentucky blue	—	—	—
Timothy (herds of the north)	—	3 00	—
Orchard,	—	2 00	2 50
Tall meadow Oat,	—	—	3 00
Herds, or red top,	—	—	1 00
HAY, in bulk,	ton.	12 00	16 00
HEMP, country, dew rotted,	pound.	6	7
“ water rotted,	—	7	—
HOGS, on the hoof,	100lb.	9 37	9 50
Slaughtered,	—	9 00	9 50
HOPS—first sort,	pound.	20	—
second,	—	18	—
refuse,	—	—	—
LIME,	bushel.	32	33
MUSTARD SEED, Domestic, —; blk.	—	3 50	4 00
OATS,	—	45	—
PEAS, red eye,	bushel.	—	1 12
Black eye,	—	1 00	1 12
Lady,	—	—	—
PLASTER PARIS, in the stone, cargo, ton.	—	4 25	—
Ground,	barrel.	1 50	—
PALMA CHRISTA BEAN,	bushel.	—	—
RAGS,	pound.	3	4
RYE,	bushel.	100	105
Susquehanna,	—	—	none
TOBACCO, crop, common,	100lbs	5 00	5 50
“ brown and red,	—	6 00	6 50
“ fine red,	—	9 00	12 00
“ wrappery, suitable	—	—	—
“ for segars,	—	10 00	20 00
“ yellow and red,	—	10 00	14 00
“ good yellow,	—	10 00	15 00
“ fine yellow,	—	12 00	15 00
Seconds, as in quality,	—	6 00	—
“ ground leaf,	—	7 00	9 00
Virginia,	—	6 00	10 00
Rappahannock,	—	—	—
Kentucky,	—	6 00	8 00
WHEAT, white,	bushel.	—	—
Red, best	—	1 70	1 75
Maryland	—	—	—
WHISKEY, 1st pf. in bbls. } gallon.	—	44	45
“ in hhd. }	—	41	—
“ wagon price,	—	—	41
WAGON FREIGHTS, to Pittsburgh, 100lbs	—	3 00	—
To Wheeling,	—	3 00	—
WOOL, Prime & Saxon Fleeces, ... pound.	—	50 to 55	—
Full Merino,	—	45 50	—
Three fourths Merino,	—	40 45	—
One half do.	—	35 40	—
Common & one fourth Meri.	—	35 40	—
Pulled,	—	30 33	—
POTATOES, 60 to 70 cts. a bushel.	—	—	—

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,	barrel.	—	—
BACON, ham, new, Balt. cured	pound.	13	15
Sn. ulders, do.	—	12½	13
Middlings, do.	—	12½	—
Assorted, country,	—	10½	—
BUTTER, printed, in lbs. & half lbs.	—	31½	50
Roll,	—	25	31½
CIDER,	barrel.	1 75	2 00
CALVES, three to six weeks old.	each.	5 00	6 00
Cows, new milch,	—	30 00	40 00
Dry,	—	—	—
CORN MEAL, for family use,	100lbs.	2 00	2 12
CHOP RYE,	—	—	1 60
EGGS,	dozen.	25	—
FISH, Shad, No. 1, Susquehanna, barrel.	—	6 00	6 25
No. 2,	—	—	—
Herrings, salted, No. 1,	—	6 00	6 25
Mackerel, No. 1, ——— No. 2	—	11 75	13 50
No. 3,	—	7 50	—
Cod, salted,	cwt.	3 25	3 37½
LARD,	pound.	12	13½

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

U. S. Bank,	par	VIRGINIA.
Branch at Baltimore,....do		Farmers Bank of Virgi. par
Other Branches,.....do		Bank of Virginia,.....do
MARYLAND.		Branch at Fredericksburg,do
Banks in Baltimore,....par		Petersburg,.....do
Hagerstown,.. ..o		Norfolk,.....do
Frederick,.....do		Winchester,.....do
Westminster,.....do		Lynchburg,.....do
Farmers' Bank of Mary'd,do		Danville,.....do
Do. payable at Easton,...do		Bank of Valley, Winch. par
Salisbury,.... 1 per ct. dis.		Branch at Romney,... par
Cumberland,.....par		Do. Charlestown, par
Millington,.....do		Do. Leesburg,... par
DISTRICT.		Wheeling Banks,... 2½
Washington, } Banks, 1 p.c.		Ohio Banks, generally 3
Georgetown, }		New Jersey Banks gen. 3
Alexandria, }		New York City,.... par
PENNSYLVANIA.		New York State,.... do ½
Philadelphia,.....par		Massachusetts,.... 1½a2
Chambersburg,.....½		Connecticut,.... 1½a2
Gettysburg.....do		New Hampshire, ... 1½a2
Pittsburg,..... 2½		Maine,..... 1½a2
York,.....½		Rhode Island, 1½a2
Other Pennsylvania Bks. 2		North Carolina,.... 3a2½
Delaware [under \$5].... 4		South Carolina, 4a5
Do. [over 5]..... 1½		Georgia,.....5a5½
Michigan Banks,.....10		New Orleans..... 7a8
Canadian do.....10		

FRESH SUPPLY OF FIELD AND GARDEN SEEDS.

BY THOMAS DENNY, Ellicott near Pratt street, Baltimore, who has just received general supply of GARDEN SEEDS, the growth of 1838, part of which was raised by the first Seedsmen of this country, and a part imported, all of which will be sold wholesale and retail, upon the best terms, such as

GARDEN PEAS; Early and Late assorted Cabbage; Cauliflowers; Radish; Lettuce; Cucumber; Parsnip; Carrot; Onion; Rutabaga Turnip; Parsnip seed of all kinds; Garden Beets assorted; French Sugar Beet; Mangel Wurtzell, &c. &c. Also Field SEEDS, such as Early Sugar, Early White, Sioux, Chin or Tree Corn; Dutton, Baden and Twin Corn; Red Clover; Luzerne and White Dutch Clover; Timothy; Orchard; Herds; Millet, Tall Meadow Oats; superior Seed Oats; Spring Wheat; Spring Rye; Spring Barley; Seed Buckwheat; blue and Kentucky Lawn Grass, &c. &c.

Also GARDEN TOOLS, assorted sizes, and late improved patterns; Bird Seed of all kinds, Double Dahlias; Hyacinths, and Polyanthus, assorted, and selected for beauty and richness of colours, together with choice Flower Seed, assorted; Mulberry Trees; Fruit and Ornamental Trees; Silk worm Eggs; &c.; Agricultural Books; Silk Manuals; &c. Rohan Potatoes—Early Seedling do. &c. All orders by mail or otherwise will meet with early attention and dispatch, on the best terms for cash.

ja29

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AGRICULTURAL IMPLEMENTS.

THE Subscriber acknowledges with gratitude the liberal patronage he has received from the public since the establishment of his Repository in 1825.—During this long period he has studied successfully his own interest by identifying them with the interest of his customers in being prompt and faithful in the execution of their orders.

His present facilities of manufacturing agricultural implements, are not surpassed by any other establishment in this country, he can therefore afford them on as reasonable terms as any other person for the same quality of work. His present stock of implements are extensive both in quality and variety, to which he would invite the attention of those who wish to purchase.

A liberal discount will be made to all cash purchasers, and to those who purchase to sell again.

The following names are some of his leading articles viz His PATENT CYLINDRICAL STRAW CUTTERS, wood and iron frames, but all with his patent double eccentric feeders, with or without extra Knives, prices varying from \$33 to \$110, subject to cash discount, he challenges the world to produce a better machine for cutting long forage, Myer's WHEAT FAN and ELIOTT'S PATENT HORIZONTAL WHEAT FANS, both a very superior article. Fox & Borland's PATENT THRESHING MACHINES and Martineaux's PATENT HORSE POWERS, also superior articles—

A great variety of PLOUGHS, wrought and cast Shares, of all sizes and prices; Gideon Davis's improved PLOUGHS, of Davis's own make of Patterns, which are sufficiently known to the public not to require commendation; 100 CORN CULTIVATORS, also expanding CULTIVATORS, both iron and wood frames, and new plan; TOBACCO CULTIVATORS.

F. H. Smith's PATENT LIME SPREADERS, the utility of which has been made known to the public; together with a general assortment of FARMING IMPLEMENTS; PLOUGH CASTINGS of every description and superior quality kept constantly on hand at retail or by the ton; also, MACHINE and other CASTINGS furnished at short notice and on reasonable terms, his iron Foundry being furnished with the best materials and experienced workmen with ample machinery running by steam power for turning and fitting up machinery.

ALSO—Constantly on hand D. Landreth's superior GARDEN SEEDS;—In store POTATOES and common SEED OATS, TIMOTHY and HERDS SEEDS all of superior quality.—All orders will be promptly attended to.

JONATHAN S. EASTMAN,

Farmers' Repository, Pratt street, Near the Baltimore & Ohio Rail Road Depot.

A SETTER FOR SALE.

The subscriber has for sale a thorough bred Setter, eleven months old. He has been but little hunted but gives indication of making a first rate dog. He comes of a strain remarkable for their fine performance in the field, and is a beautiful rich brown white in the breast and face. His price is \$30. All applications by letter must be post paid. fe 26 EDWARD. P. ROBERTS.

SEEDS, PLANTS, FLOWERS.



The subscriber offers for sale at his establishment a fresh supply of GARDEN SEEDS of the very best quality; those that cannot be grown in this country he imports direct from Europe from a source that can be relied on.

Besides a large collection of GREENHOUSE, hardy ORNAMENTAL TREES and Shrubs, Herbaceous Plants, and Bulbous Roots, and a choice collection of the very finest double Dahlias offered for sale, all on reasonable terms, wholesale or retail.

Also on hand a few bushels of ITALIAN RYE GRASS, with 100 bush. ITALIAN SPRING WHEAT, of the true kind. All orders for Fruit and Ornamental Trees, or any thing appertaining to his establishment will be strictly attended to, by

JOHN FEAST,

Florist & Seedsman, cor. of Lexington and Pine sts. ja 22 tf Baltimore.

Printing, executed at the Farmer & Gardener office, at short notice.

THE AMERICAN FARMER.

The proprietors of this paper have a few complete sets of this work on hand, which they will dispose of at the reduced price of \$50 a set.

oct. 16

3

THE FARMER & GARDENER

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, E. P. ROBERTS AND SAMUEL SANDS—EDITED BY E. P. ROBERTS.

No. 47.

BALTIMORE, MD. MARCH 19, 1839.

Vol. V.

— This publication is the successor of the late
AMERICAN FARMER
and is published at the office, at the N. W. corner of
Baltimore and North streets, over the Patriot office, at two
DOLLARS AND FIFTY CENTS per annum, if paid within one
month from the time of subscribing, or \$3 if after that
time. All letters to be postpaid.

BALTIMORE: TUESDAY, MARCH 19, 1839.

The reader is referred to the extensive sale
of stock as advertised in another column to take
place at Govanstown on the 25th inst. The
short horn Durham bull, *Juniatta*, is of a stock
renowned alike for great size, fat in the right places,
deep milking, and butteraceous propensities.

Great Sale of Morus Multicaulis.—We take
pleasure in calling public attention to the sale of
Morus Multicaulis trees, which is to take place in
this city on *Wednesday* the 27th inst. For the
convenience of purchasers, the proprietor of the
trees has had them carefully packed in boxes, so
that they will bear transportation to any point of
the country. The number of buds in each box,
as ascertained by sworn counters, is marked
thereon; and we may add, that the trees themselves
are represented to us as being in a fine
state of preservation and growth, having been
cultivated with every possible attention under the
direction of a gentleman who is not less distinguished
for his zeal, than he is for the high order
of his intelligence.

While the Legislature of Maryland is still in
session, it may not be considered obtrusive, we
hope, to call their attention to the subject of the
law relative to the Silk culture, which has been reported
in the House of Delegates. In so doing,
we shall not attempt to discuss the propriety of its
passage, because a proposition so self-evident,
scarcely admits of argument; for in truth, were
any one even to venture on the assumption that
there were two sides to the question, it would assuredly
be an impeachment of his own judgment. Our object
in this notice is, therefore, simply to elicit the attention
of the Legislature, in order that the bill may not be
laid over, and be lost in the scramble for precedence
towards the close of the session.

Sugar Beets.—Believing that this root is among
the first of all the root family in excellence
as feed for stock, we take time by the forelock to
request our agricultural brethren to try a small
experiment in their culture this season.

We insert to-day the following letters relative
to Mr. Comstock's discovery, to which we alluded
in our last:

SENATE CHAMBER, Jan. 23d, 1839.

Mr. R. Comstock, Sir—We, the subscribers,
have perused your memorial to Congress on the
cultivation of trees and plants, and have had several
interviews with you on the subject, and believe
that you are in possession of a valuable system
of *Terriculture*, that ought to be made public.

RICHARD M. JOHNSON,
SAMUEL McKEAN,
LEWIS F. LINN,
A. MOUTON.

WASHINGTON CITY, Feb. 22, 1839.

Sir—In several conversations which I have had
with you, you have submitted, confidentially,
your scheme for the cultivation and management
of trees and plants, by which diseases are prevented,
or cures effected, where they exist. I am
very favorably impressed with your theory—It
strikes me as strictly analogous to nature, and
founded on correct philosophical principles. As
far as my limited observation and information
extends, they confirm your views. Your system is
simple, economical, and I have no doubt would
be of much utility, if known and acted on, in
most, if not all the varieties of *terriculture*. Its
publicity is desirable, and I would be highly
pleased to see a mean by which you could be
properly rewarded, and the public benefitted in its
being made public property.

Very respectfully,

Your obedient serv't,

F. H. ELMORE.

Mr. RUSSELL COMSTOCK.

WASHINGTON, 9th February, 1839.

Dear Sir—Though not a horticulturalist either
by reading, or practice, I was attracted by the
memorial presented by you to Congress, because
in the section of country in which I reside, we
find peculiar difficulty in rearing shade and fruit
trees, and especially the latter; and as you stated
that trees would apparently do well for a short
time after transplanting, even if the erroneous
mode of culture is pursued, but would then sicken,
decay and die, which is the experience I have
had, I could not fail to be interested in the discoveries
you claimed to have made by which these

fatal errors may be avoided, and the trees made
healthy and fruitful.

Not being able to satisfy myself, however, that
the powers of this government extend to legisla-
tion such as you requested, and such as your case
demands, if a Government is to appropriate the
discoveries, and compensate you as discoverer, I
did not anticipate being able to form a judgment
upon the value or efficacy of your proposed
modes of culture. You have, however, under
honorary confidence, communicated to me the
principle upon which your theory rests, and, in
justice to you, I feel bound to say, that it seems
to me entirely philosophical, and so plainly consistent
with a natural economy in vegetation, that
without knowledge or the opportunity to make
an experiment, I find myself scarcely able to entertain
a doubt that it is well founded. If this be
so, it must necessarily be universal, or very nearly
so, to all vegetation, although the application
to trees may be more simple, easy and certain, as
well as more essentially necessary, than the smaller
plants. Yet I confess, if the principle be admitted
to be sound, and to possess the utility, when
applied to the culture of fruit and other trees,
which your experiments seem to prove, the conclusion
is unavoidable, that our ordinary modes of
seeding and culture, in the growth of our most
important crops are in many respects essentially
defective, and in some material particulars,
radically erroneous.

I suppose there is little doubt, that most, or all,
of the State Legislatures will find it within their
powers to extend their patronage to improvements
in agriculture; and as I think your principle
deserves to be tested most effectually, I hope you
will find some State, or some association of capitalists,
willing to compensate you for the time and
expense you have bestowed upon its development
thus far; to prosecute the experiments upon
our ordinary grains and other crops; and, if
found as useful as your trials seem to promise,
further willing and able to give to the whole
public all the benefits to be derived from your
and their discoveries.

I am, very respectfully,

Your ob't. serv't.

SILAS WRIGHT, Jr.

RUSSELL COMSTOCK, Esq.

HOUSE OF REPRESENTATIVES,
February 25, 1839.

Sir—I have no doubt, your scheme for the
cultivation and management of trees and plants,
which you have submitted to me confidentially,
contains a valuable principle, which I should be
glad to see made public. I intend trying it fully,
this year in the cultivation of cotton, the result of
which I will communicate to you.

Your ob't. servant,

DIXON H. LEWIS.

RUSSELL COMSTOCK.

SENATE CHAMBER, February, 1839.

Dear Sir—We, the subscribers, have read your memorial soliciting Congress to purchase and make public your discoveries and knowledge on the cultivation of trees and plants of every description; and we are satisfied, from the information received (confidentially forever) from you, which is founded on some philosophical principles that are established by various authors and confirmed by our own observations, that your memorial does not overrate the value of your knowledge on this subject, and that it ought to be made public; and, we are in hopes that the State Legislatures, will purchase your discoveries, not only on account of their extreme value to the public, but because it is questionable whether a patent law would or would not protect you.

L. F. LINN, *Com. on Agriculture.*

J. RUGGLES.

To Mr. R. COMSTOCK, *Dutchess co., N. Y.*

WASHINGTON, 9th February, 1839.

Dear Sir—I have read your memorial to Congress in reference to the cultivation of trees and plants, with attention; and although I do not think that Congress can act on the subject consistently with the Constitution, yet I deem any improvement in the mode of their cultivation of great importance, and deserving of public patronage.

To what extent yours may be an improvement on the best existing modes, I am not competent to judge; but I do not doubt, from what you have stated to me in relation to it, that it is founded on philosophical principles, important to be observed in the cultivation of trees and plants, and which cannot be neglected without injury to their health and growth.

With respect,

Yours, &c. &c.

J. C. CALHOUN.

Mr. R. COMSTOCK.

HOUSE OF REPRESENTATIVES, }
December 18, 1838. }

Sir—Permit me to present to you Mr. Russell Comstock, a friend and townsman of mine, who claims to have discovered a remedy for the prevention and cure of the various diseases by which fruit trees and other plants are so frequently injured or destroyed.

He designs to present a memorial to Congress, asking remuneration for a disclosure of his valuable knowledge on this subject. I beg sir, your favorable consideration of his application.

Respectfully,

Your ob't. serv't.

OBADIAH TITUS.

Hon. DR. LINN, U. S. Senate.

ROOTS—ROOTS.

The importance of raising roots to be used as food for cattle, horses and swine, during our long winters, cannot be too often nor too strongly impressed upon the farmers of Maine, at least until more of them enter somewhat more largely into the business than they do at present.

Potatoes are planted by every one as a matter of course. Next to potatoes perhaps the Ruta бага crop commands the most attention. The Sugar beet is next in order, though of but recent intro-

duction. Mangel Wurtzel have not generally found so much favor with the farmers of Maine as they ought to; nor has the carrot—but the most neglected of all is the parsnip. We do not recollect of ever having seen a field of parsnips growing in Maine, and yet we verily believe that, all things considered, they are the most profitable of either as an article of food for stock and swine. We have heretofore tried some experiments on a limited scale with them, and, Providence permitting, we shall go more extensively into it another season. They require a little more care when they first come up, and are smaller than Ruta Бага, but are not so difficult as the carrot. They seem to be more nourishing than any other root, and chemical analysis warrants this idea. They will keep in the ground during the winter, but must be dug before they vegetate much in the spring. They will not keep so well in the summer as the Ruta Бага. The farmers in the Island of Jersey, near England, are said to make their main dependence upon this root, and their cattle and swine are thereby rendered very profitable. The only objection that we know of to the carrot is the trouble it gives in weeding when it first comes up. Its small leaves so much resemble some of the weeds, that if the ground is very foul, it requires careful management to avoid hoeing it up with them. We have seen the good effects of these upon a horse to which they were given during the winter season. They certainly are preferable to oats, or at any rate were for that horse. The animal was a very fleet one, and belonged to a neighboring Physician who had a great deal for him to do; and yet he kept in perfect condition with no other food than good hay, and from a peck to a half bushel of carrots per day.

The Mangel Wurtzel will yield when put in a favorable situation as much per acre, perhaps, as any other root. John Hare Powell once raised 1634 bushels on 1 acre and 14 rods; and Messrs. H. & T. Little, of Newbury, raised thirty-three tons, ten hundred and fourteen pounds to the acre. But English writers have told us of sixty tons to the acre. We believe that it requires a richer soil than Ruta Бага, and more of a clayey loam. Hogs are very fond of them. We saw Mr. Hains of Hallowell feeding his swine with them last fall, raw, and the manner in which they took hold of them, and the good condition which they exhibited convinced us that they were very profitable and nutritious to them. See his communication in the last number of the Maine Farmer. The more we see and learn of the value of the several root crops in Maine, the more convinced are we that it is the true policy of our farmers to cultivate them extensively; and we hope that many who never have yet paid particular attention to this business, will begin this year. Manure high and plant close, and we will insure you a good and a profitable crop.—*Maine Farmer.*

In our last paper, we made some suggestions to farmers about preparation for spring, and shall continue to remind them of their duty through the spring and summer months.

Fencing.—The best fence that can be made on some land, is to take cedar logs and place a bunk under the end with two holes bored with a 3 inch augur about two feet apart, into which stakes

should be placed, and after laying in logs to the height desired, put a top-piece on the stakes.—This makes a substantial and durable fence, and the stakes and bunk and top pieces may be prepared this month and carried on to the spot. Fencing should be hauled before the ground thaws, as near as possible where it is to be used, because fences should be repaired before the ground is fairly settled, and cattle will make bad work travelling over a field when the frost is coming out, especially if the land is naturally moist.

If the snow should not be deep, those who have new land to clear will find it a favorable time "to junk" the trees preparatory to "piling and burning them off."

If you have any repairs to make to your buildings during the summer, this is the month for getting ready. If your barn wants to be new silled, haul up the timber and hew it. If any of your buildings want new shingling, haul up some rift and pile it where it will be ready to "work up" in stormy weather during the spring and summer.

If the season should be favorable, the latter part of this month will be the time for making sap sugar, for which we will subjoin a few short directions, presuming however that nearly all our readers understand the general principles.

In tapping trees to obtain the sap, some people are in the habit of cutting a notch with an axe in one side of it, which will destroy the tree and render it useless in a very few years. The tree should be tapped on the south side with a 3-4 inch bit or augur, and the hole should not be bored into the wood of the tree more than one inch and a half. A small spout or tube should be driven into the hole, to conduct the sap, and it should be stopped tightly with a pine plug after the sap is drawn out for the season.

Before the sap is put on to boil it should be strained through a very thick cloth, and after it is boiled down to a sirup, it should be strained again and let it stand until it has settled, and then pour off very carefully into the kettle, all that will run clear, and again place it over the fire, and pour about a quart of milk into a five pail kettle as full as you can conveniently boil it, stir it well and take off the scum as it rises. When it has become quite thick a small portion should be taken out and cooled, and if you find it has grained or become sugar, it should then be poured into a vessel to cool, after which it should be placed in such situation that it can drain; as there is always some portions of the sap that will not form sugar, which should be drained off. The sugar will then be dry, light colored and pleasant flavored.

There are several other modes of making sap sugar, but the foregoing is the most convenient and simple, and will produce sugar as light colored as any brown sugar usually kept at stores for sale.—*Id.*

Milk Sickness accounted for.—It is said a specimen of the tree, called the Sodomite, has been sent to the St. Louis museum. This tree, which is a species of the Bohan Upas is said to produce the milk sickness which so extensively prevailed throughout the West during the last season. It operates as a slow but malignant poison.

ON SEEDING DOWN

Much discussion has taken place as to the proper season for seeding lands down to grass. It would seem hardly a proper time in Massachusetts to sow much in January, but you cannot choose a better month for sowing your clover seed, provided there is snow enough to show your tracks. Indeed, we may sow this seed in any of the winter months, if the ground was suitably prepared in the autumn.

Lands that have been planted, and are to be sown with grain, should generally be laid down to grass in the spring season. Sometimes this is delayed till fall, and then the stubble is ploughed in and the seed is sown on the furrow, but this seldom succeeds so well as spring sowing. The stubble ground dries so quick in August, or in September, that much of the seed never vegetates, and much of it often dies after sprouting. This often happens, also, with spring sowing, but if you can sow early in spring, you run less risk of losing your seed, than to sow it on stubble ground. If your land be light and inclining to sand, you cannot do better than to throw twenty bushels of wood ashes on an acre at the time of sowing, or soon after your grain is up. These draw moisture to your plants and preserve them better than any article you can apply.

Ye have heard it said of old, "put ashes on the low land because they are of a hot and dry nature;" but we say to you, they are the coldest manure you can apply, and that they will keep your dry grounds moist longer than any article we have ever applied. Do you want proof of this? Set a barrel of dry ashes on the ground and in a very short time they all become damp, and they remain so.

We will say more of our ashes in a future number and do our seeding now. With the exception of stubble ground, we think fall sowing preferable to spring sowing. We are not obliged to go through the tedious and unprofitable process of planting and hoeing our low grounds in order to renovate and bring them into grass again. We have a shorter, less expensive method.—You all have lands too low to be planted at a profit.—You therefore suffer these to lie from year to year, yielding nothing that will pay for whetting your scythe. You dread to meddle with such land, as we once did, for after you have planted it, and obtained half a crop, you could not lay it down smooth for the hard lumps it contained, or for the mire in the hollows. Such land, if not too rocky, may be directly brought into excellent grass without summer fallowing or losing a crop.

In the last week in August, if you have several acres to turn, you must begin to plough. Do not take a rooter, or a plough not longer than a hog's snout, but take one that has some length in the waist—the ladies now think they *have been* to an extreme in short waists,—take one that will take up a slice and lay it down again completely the other side up. Let all the grass be turned in, we want it there for manure. We have such ploughs, and we advise you to look them up. As soon as you have ploughed one acre put on a dozen loads of your fine manure, which you have been preparing through the summer, and, first having rolled down your furrows close, spread your manure evenly, harrow the ground thoroughly lengthwise

of the furrow, then a little diagonally, but never crosswise. In a short time you will make the acre like a carrot bed. Then sow a peck of herd's grass and a bushel of red top seed before the ground has time to dry, and cover the seed with a bush harrow. It will vegetate much sooner for sowing on a fresh furrow. It is no more likely to be winter-killed, than seed sown in spring. As soon as it is so late that seeds will not vegetate, you may sow on eight pounds of clover seed, or less, if you would like a lot of fall feed the next year; and clover thus sown will not be much in the way of your other grass. It will help to fill up the interstices, and when it has flourished two years, it dies and leaves a taproot in the soil to rot, and afford nourishment to the roots of the more valuable grasses.

When you have finished one acre you may take another, and you cannot at that season be better employed. We don't allow of mowing bushes. Let them grow to be fire-wood; or let the plough run in your pastures and root them up—so you can have nothing better to do about the first of September, than plough and sow down. At that season too, your team is strong. It costs little to keep it, for it is fed in the very field you are ploughing, and is always on the ground ready for work.

You have now turned in about ten or twelve tons of rowen to the acre to be rotted. If you doubt this, weigh the grass, root, and branch, of one square foot, and multiply that by the number of feet in the acre. This rowen will keep your ground light one year longer than you can keep pulverized earth light; and when you find the rushes and the sour grasses coming in again, as they will in low moist land, go through the process again, and the oftener you repeat this, the richer will be your land if you forbear to take off a crop of grain.

Grass does not impoverish land. Do you doubt this? After you have mown a field seven years, you will raise as good a crop of corn, or potatoes, as if it had been mown only three years. It does not produce as much grass because the ground has become full of roots, and, as we say, bound out; so that the oftener you turn in a crop of this rowen, the richer your land. After a few repetitions you will need to apply no manure. The former mass turned under, will, in its turn, become a top dressing, and you can then renovate your grass lands at much less expense. We have been trying this process for some years, or we should not recommend it to you, with so much confidence. We speak of what we know. We have thus turned low, interval lands, that had lain unproductive for more than half a century, and got them into fine fields, that produce good crops of the best kinds of hay, instead of a little moss and mouse-ear that would starve a frog.

Higher lands may be treated in the same way—if they are not wanted for grain; and thus we may renovate a whole farm, for our process does not require half so much manure as the planting and hoeing process.—We must raise grain, but we are not obliged to use *all* our manure in planting. We must till a less area, and till it better, and thus, be more sure of a supply than by planting a large number of acres.—*Essex Gazette.*

MULBERRY AND SILK BUSINESS.

It is the duty of every man who wishes well to his country, to aid its growth by his influence and industry. We believe the culture of silk will ultimately be an important branch of domestic culture, and that it must greatly enhance the wealth of the American people. The business is simple in itself and does not require any of the heavy capital or complicated labor which is bestowed upon the manufacture of Broadcloth or Cotton. It is a fire-side business, a home industry, exclusively an agricultural production. Trees are to be planted, which in the course of two years* will yield food for worms. They are to be hatched out in open barns and sheds in mid-summer, when such places are not occupied for other purposes. Six weeks or two months is the usual period for feeding the worms, and this can be done on the farm by feeble old men, women and children.—The worms wind their own cocoons, and they are to be laid by for a rainy day or long winter evening, to be wound into raw silk as convenience requires. The sale is quick at high prices, and the factories are obliged to import raw silk from China, because it is now raised in such limited quantities in New England. But all is not gold that glistens. Because mulberry trees are now selling at exorbitant prices, let it not be supposed these prices will continue longer than mid-summer, or that the raising of trees is the great object to be attained. The silk business is the *end*, and the trees are the *means*, through which this must be reached. Silk cannot be grown while the trees are so exorbitantly high. They must be multiplied until the country is filled with them, and then will commence the progress of the silk business. At the West and South and in the middle States, the subject engrosses public attention, and cocoeneries for feeding worms and preparations for raising the raw material, are every where in progress. Comparatively nothing is done in New England, except croaking, and ominous predictions, that it will not succeed: enough to curse any undertaking.—*Northampton Courier.*

* The *Morus Multicaulis* may to a profitable extent be fed from the first year.—*Ed. F. & Gar.*

Foot Rot in Sheep.—*Sir:* Hearing that the foot rot in sheep is very prevalent this season, I beg, through the medium of your widely circulated paper, to offer the following recipe which is an easy and effectual cure.

Towards evening draw the lame sheep from the flock, pare the hoof of the diseased foot, as far as it has any dirt or fester under it; wipe it dry and clean, and bathe the tender parts in the evening with a feather previously dipped in butter of antimony; keep their feet dry through the night, and on the following day, they may be turned into a pasture by themselves, where they will daily become better. At the expiration of about a week they should again be examined. The majority of them will be found perfectly well, and may be allowed to join the sound flock as they will be clear of all infection. Perhaps about one in ten may require a little more paring with a knife, and a very slight re-dressing of the sore place, with the feather prepared as before.—*Carlisle Pat.*

JOHN BIRKETT.

[From the Magazine of Horticulture.]

Address delivered before the New Haven Horticultural Society, Sept. 25th, 1838. By Charles Upham Shepherd. 8vo., pp. 24. New Haven, 1838.

THIS excellent address has been laying before us for some time, and it should have received our attention long since; but the crowded state of our pages, attended with additional labor in preparing for a new volume, has put us under the necessity of deferring a notice of it until the present month. We have very little room to spare even now, but Prof. Shepherd's remarks are so good, and so appropriate to the state of horticulture in other cities, as well as New Haven, that we cannot refrain from making a few extracts.

Prof. Shepherd, though stating at the outset that if much was expected from him on account of personal experience, he should despair of fulfilling the requisites of the occasion, has, notwithstanding, performed his duty with honor to himself, and to the science to whose advancement the society is devoted. Professor Shepherd, in the first instance, urges, what we have repeatedly done, more attention to the cultivation of vegetables, both by the farmer, "the mechanic, the tradesman and the professional man," when a spot of ground is attached to his dwelling; and justly observes, that the "very free use of animal food is a vice in the dietetics of our people."

He next speaks of the soil of the gardens in the city and vicinity of New Haven; and the following remarks, in connection with this subject, are so correct that we present them entire:

"A deficiency in the *pabulum* of vegetation, is at the foundation of the unproductiveness of our gardens. The soil being sandy, is strongly acted upon by the sun's rays, whereby the aqueous and gasiform ingredients of the compost are dissipated, or, in the language of the Cultivator, 'burnt up,' a fact which is not so generally understood as could be desired; for many persons supposing, instead of this result, that the nutritious matter has descended into the subsoil along with the water of filtration, seem to imagine that, in place of a new dressing, the garden only requires deeper digging. This error of opinion, in respect to the easy descent of the fertilizing particles into our light soils, is particularly prevalent among the farmers of the vicinity, who, in applying fish to their land, do it in so unskilful a manner, that the stars equally divide the benefit with their crops. * * *

"It should farther be observed, that if gardens are yearly dressed with proper amendments, they will be much better able to withstand the withering influence of droughts when they occur in late summer; for the crops will either be matured, or the ground so completely covered with plants, as to screen its surface from its scorching effects of the sun's heat. Under such circumstances, irrigation can be adopted with benefit; whereas, if the soil be exposed to the sun when artificial watering is resorted to, it rarely proves of any use."

Passing over a variety of subjects connected with that part of gardening which relates to vegetables and fruits, Prof. Shepherd approaches the "Domain of Flora," and in the following language urges the cultivation of flowers:—

"Need I speak of the inducements to cultivate

such plants within and about our houses? While their delicious odors regale our senses, their form and beauty may be said to improve our taste. The inspection of plants so dissimilar to our native productions, is calculated to awaken in the minds of the young a curiosity in favor of botany; a science whose study has been found to be highly propitious to early mental culture,—operating as it does to sharpen the habits of observation, to promote discrimination, and to impart, in a remarkable degree, the perception and love of order. Or, if the growth of foreign plants go not so far as to make us botanists, it rarely fails of lending aid in several subjects of general intelligence. By whom, for example, can the figures in the sacred writings, respecting the heath of the desert, or the tares that grow with the wheat, be apprehended in their full force, except by the nice observer of plants? Readers of the bible, who are destitute of a curiosity in plants, will be apt to fall into the common error of supposing the plant which protected the fainting prophet from the ardor of an eastern sun, to be our well known gourd, instead of the *palma christi*, or castor-oil plant,—that the abstemious diet of the Baptist was a disgusting insect, instead of the saccharine pods of the beautiful caroub-tree,—or that the lilies of the field, whose glory attracted the notice of the Savior of mankind, was our white garden-lily, instead of the rarer greenhouse plant, the *Pancratium maritimum*."

He next calls attention to the cultivation of our native trees, shrubs and plants, and notices upwards of fifty species, whose claims to our care are far greater than many of foreign origin. The list is too long for insertion, but a great part of them are those which have been described in our previous volumes (I and II), by Mr. E. Kenrick. Native ornamental trees are recommended, and the planting of the classic pine, especially the *P. Strobus*, "the loveliest of the group."

There are various other portions of the address which would be read with great interest, but we must close this notice with the following remarks on the planting of trees:—

"The planting of trees, though ennobled by the example of heroes, philosophers and patriots, is a mode of exercising benevolence, patent to all. The man in humble life may partake of the pleasure of erecting these verdant monuments to his memory, which outvie in perpetuity the splendid palace of his wealthy neighbor. The satisfaction of the employment is pure, and wholly unmixed with corroding care. He who erects magnificent buildings experiences unceasing anxiety while the work proceeds. His taste and judgment have to pass the ordeal of public criticism, and, whether approved or condemned, the exhibition of his wealth is sure to excite envy; while he must reflect, moreover, that what is now regarded as correct in taste, will, in thirty years, be considered odious and unsightly, and what is now fresh and perfect, will, in as many lustrums, yield to inevitable decay and ruin. On the other hand, he who rears trees, performs the useful labor without attracting notice, a circumstance not without some pleasure to a virtuous mind. He beholds them flourishing in elastic youth and vigor, spreading their fresh branches and lifting their verdant crowns into the air; he knows that they will continue to expand, to widen their shape and

soar still higher, assuming the perpetually graceful forms which nature ever bestows on her own productions. And when the planter is himself called from

"The warm precincts of the cheerful day," he is sure that he leaves behind, monuments that can

"The place of fame and elegy supply;" that as the wan traveller in future years rests his weary limbs beneath their shade, or as happy children gambol there, on him will be bestowed 'the passing tribute of a sigh;' and thus his name be handed down to after days, far beyond the date to which his unaided labors or virtues could have transmitted it."

[From the Magazine of Horticulture.]

The American Silk Grower's Guide, or the art of raising the Mulberry and Silk, and the system of successive crops in each season. Second Edition, enlarged and improved. By William Kenrick. 12mo., pp. 168. Boston: Weeks, Jordon & Co. 1839.

If books were all that were wanting to ensure success in the silk enterprise, which is now attracting the attention of the community, there would be no fear but that it would progress most rapidly. Since the publication of Cobb's *Manual*, some eight or ten, or more, small works have been got up, professing to give directions for the cultivation of the mulberry, the rearing of the worms, &c. The first named work, though not professing much, was nevertheless a practical one, as it was the result of much attention to the subject, and related principally to the rearing of the worms and the reeling of silk: the cultivation of the mulberry (the common white) being so simple as to require but little to be said thereon. The *Manual* had the effect for which it was intended, and was the means of drawing attention to this important subject. After a lapse of time, however, the interest in the silk enterprise fell off, and it was not till the introduction of the *Morus Multicaulis* that the public were again awakened to its importance.

With the introduction and cultivation of this tree, came a multiplicity of works upon its growth, (which is far more simple than the white,) and the manufacture of silk; and among the number was that which stands at the head of the article, the first edition of which was issued two years ago.

We will not say but that much good has arisen from the dissemination of these works; but we must not disguise the fact, that, with the exception of what relates to the cultivation of the tree, (which might be given in a few pages,) many of them have been merely compilations from Lardner's *History of the Silk Manufacture*, and other foreign works upon the subject, and not the experience of the authors.

Mr. Kenrick's work is divided into forty-nine sections, commencing with the history of the silk worm; next, the varieties of the mulberry—cultivation—gathering leaves—feeding the worms—reeling—successive crops—manufacture of silk, &c. &c. Mr. Kenrick was one of the first to introduce the *morus multicaulis* into this vicinity, and his experience in its cultivation enables him to impart much useful information in that portion of the work which relates to its growth and propagation.

Mr. Kenrick describes nine species and varieties of the mulberry; among the number is a variety called the Chinese, the young trees of which were introduced from Canton by J. P. Cushing, Esq., of Watertown, and which Mr. Kenrick considers "eminently splendid," for the feeding of the worms.

We conclude our notice of Mr. Kenrick's work, where, perhaps, we should have begun, by quoting part of his prefatory remarks, that our readers may see with what enthusiasm he grasps the subject:—

"Our advantages are indeed very great; to be duly appreciated they must be estimated singly and individually. How much greater and more striking will they then appear, if considered collectively. Our innumerable rivers and rapid streams, our immense forests and mines, the exhaustless treasures of fuel and of flame, the combined elements of water, earth, and of fire, offer resources of mighty power, unknown and immeasurable, and willing aids in abridging the labors of man.

"History will record to endless remembrance, the names of those illustrious individuals who have persevered as the faithful guides, and have served as lights to illumine our way, and to cheer us through the long, dark and dreary night.

"The decisive impulse is already given—already are its mighty influences extending throughout our country, far and wide. The Americans are awake! Hope dawns auspicious—the day and its brightness will be ours. Endowed, as are our people, with fortitude, with energy, and with intellectual resources unsurpassed—is there one American who can doubt?

"Most of all, might I desire to be useful, by aiding in the introduction of a culture, which may make rich the people, even of the less fertile districts, and open to our country the resources of unceasing wealth."

BOHAN UPAS OF THE WEST.

THE "MILK SICKNESS."—The mysterious disease which bears this name, is peculiar to the region West of the Mountains, and prevails only in certain districts of the region. Many parts of Kentucky, Indiana, Illinois and Missouri, have been greatly afflicted by it, hundreds have died its victims, and some districts of country are almost uninhabitable on its account. The Kentucky Legislature has long since offered a reward to any one who could ascertain the cause of this terrible disease, but all inquiries upon the subject have been hitherto unsuccessful. The St. Louis Bulletin, however, contains a letter on the subject, said to be from the pen of an intelligent gentleman, in which the cause of the disease is referred to a tree, the properties of which are described to be very similar to those attributed to the Bohan Upas of the East Indies. The letter, which will be found interesting, is subjoined.

FREMME OSAGE TOWNSHIP, }

St. Charles co., Mo., Nov. 9th, 1838. }

Mr. Koch—Sir, I herewith transmit to you one of the genuine apples of Sodom. It grew on a large Sodomite tree in Femme Osage bottom, in St. Charles county. The tree is nine feet thick, one hundred and forty feet high, and straight in

the body, there being limbs for fifty six feet above the ground. In a fruitful year it is estimated that it bears one thousand bushels of fruit. The leaves resemble those of a pear tree, but are much larger, and are evergreen; the blossoms are similar to the tulip, and when in full bloom, it is considered the most grand, beautiful, and imposing object in the vegetable kingdom. But it is of the most poisonous nature; its roots, bark, sap, leaves and fruit, are all destructive poisons. Its twigs and branches operate as a slow, malignant, and incurable poison, of a peculiar quality, destructive of animals and men. It has recently been discovered, and satisfactorily tested, that the browsing upon the sprouts about its root, is the cause of that mysterious disease, called the Milk Sickness.

The fruit, when fully ripe, has an inviting appearance, but it soon takes a dry rot, and the inside becomes a poisonous and disagreeable dust, in appearance resembling Scotch Snuff. Notwithstanding its noxious qualities, cattle and various other animals are fond of frequenting it, and feeding on its leaves, and they frequently die in its vicinity. Numerous skeletons of animals may be found in the bottom, within a mile around; but when taken in small quantities, it terminates in lingering and uncontrollable Milk Sickness.

Since the tree has been fenced in, no Milk Sickness has existed. The wood of the tree is as solid and heavy as lignumvitæ or ebony, and from its similarity, some intelligent persons have conjectured that it is the celebrated tree called the Bohan Upas in the East Indies. When any part of the bark is lacerated, a peculiar gum exudes from the wound, like unto white native turpentine, which is esteemed one of the strongest of poisons, and will blister, and seriously injure, and ulcerate the human body, if applied externally.

It is thought by some persons, that this tree might be advantageously used in the practice of medicine, if its powerful medical qualities were properly understood, but its poison is so destructive, that every person here is afraid to make any experiments with it. If the citizens of those parts of Illinois, Ohio, and Kentucky, that are afflicted with the Milk Sickness, will make proper examinations, I have no doubt that they will find somewhere in the sick district, a solitary tree similar to the one I have described above, and if they will destroy or shelter the tree, they will effectually prevent the disease.

Many marvellous stories are told in the neighborhood, but respecting many of them I am very incredulous, but the foregoing statement I have prepared from personal observation, and from information in which I could place implicit confidence. If you should desire further information respecting this tree, I will take pleasure in answering any inquiries directed to me by mail, to Missouri town, my nearest post office. With great esteem, your ob't. servant.

[From the Genesee Farmer.]

EXPERIMENT WITH POTATOES.

MR. TUCKER—I planted last spring, three acres of potatoes. One half of the ground was ploughed in the fall of 1837, and the other in the spring of 1838—the whole a clover pasture in 1837.

The part ploughed in the spring had sixty large wagon loads of straw from the barn yard put on and turned well under the sod—that part ploughed in the fall was well harrowed and cultivated and then furrowed shallow, and the seed dropped in drills, and 15 loads of straw and sheep manure, taken from the sheep sheds, put in the hills over the potatoes. This piece was decidedly better than the first mentioned. The ground was naturally moist, and the excessive rains of the springs wasted and drowned the seed very bad, so as to destroy more than a half acre, on part of which I planted on the 4th of July early white beans, from which I harvested three bushels of sound beans. Yet notwithstanding the bad season and rains, I harvested seven hundred and fifty-five bushels of potatoes, mostly pink eyes, the remainder a flesh colored (not the Sardinia,) which I call long-keepers, from their being a better potatoe for summer's use than the pink eye. But the object of this communication is to give you the result of my experiment in 1838, on the quantity of seed required.

Row.	in each hill.	Yield.	Qual. No.
1	planted 1 whole large pink eye,	41 $\frac{3}{4}$ lbs.	8
2	2 middle size,	42	10
3	1 do.	41 $\frac{1}{4}$	5
4	2 halves,	32 $\frac{1}{4}$	9
5	1 do.	39 $\frac{1}{2}$	3
6	2 quarters,	25 $\frac{1}{2}$	4
7	1 do.	37 $\frac{3}{4}$	1
8	1 very small,	40 $\frac{1}{2}$	2
9	2 do.	41	6
10	large potatoes cut in 1-8th and drilled,	39	7

The above yield was obtained from rows 1 $\frac{1}{2}$ rods long and 3 feet between the hills each way (measured, not guessed at.) The quality numbered according to size, No. 7, decidedly the best, and No. 2 had but few large enough to cook.

I have for seven years assorted my potatoes at the time of digging, and fed the small ones to my hogs, and then in the spring I again select a few bushels of the largest, and best shaped ones, and plant by themselves and save my seed for the next year from the product of those selected, and in no event planting a potatoe that the women had left as too small to cook. The above I think will sufficiently account for the good yield and quality of No. 8. I do not believe, with Solon Robinson, that whole potatoes are better than cut ones. If any person would give me the seed if I would plant whole pink eye potatoes, I would not take it, preferring to use a half one of my own raising. I have just received an order for 40 bushels of pink eye potatoes for seed from a gentleman in this county, to whom I sold the same quantity last spring, in which he says "the potatoes I had of you last spring, were planted according to your direction on four acres of ground, and I harvested over 1200 bushels the finest I ever saw, and I prefer purchasing seed of you to planting those raised on my own ground." By persevering in the above practice of saving seed we have increased the size of our pink eye potatoes one third, and the yield has nearly doubled.

I planted one and a half acres to ruta бага last spring, but the fly destroyed the whole; nevertheless I am not discouraged. You say in the Farmer of last summer, that you are overrun with all kinds of insects *except* the striped bag; we cannot make that exception. I never before saw them one-half as thick as this season.

I am rejoiced to see your correspondent L. A. M. has again commenced a series of remarks on sheep, as he is well qualified to give instruction on that subject, and there is none on which more information is needed.

I wish some of your correspondents or yourself would stir up the farmers (by constant appeals to them,) to demand of the legislature some assistance to agriculture, as they will never have any thing done for their assistance or encouragement, until the legislature is made to feel that it is dangerous (to their offices) to refuse any longer. Farmers cannot afford to lobby, and consequently there is no time to attend to their case. Even the indefatigable chairman of the committee on agriculture last year could hardly succeed in bringing the cause of the farmer to the notice of the legislature, and it is high time we took the matter into our own hands.

I remain yours, &c.

S. PORTER RHODES.

Skaneateles, Feb. 18, 1839.

[From the same.]

CURE FOR THE BLOODY MURRAIN.

MR. TUCKER—In your January number of the Monthly Gen. Farmer, I noticed a communication from S. Sizer, at the close of which he asks if any of your correspondents can furnish a remedy for the Bloody Murrain in cattle.

The disease, I suspect, is but little understood in its nature and progress, and therefore little confidence in the prescriptions of any one can be entertained. I do not pretend that what I am about to communicate will be found to be a remedy; nevertheless it may afford hints which may lead to further discoveries, if others will but communicate their experience. The disease has carried off some cattle in this neighborhood during the past season, and has been cured in some instances. I had a cow attacked very violently, but being from home knew nothing of it until late in the evening; it being too late to obtain assistance, and knowing very little about the business myself, I did nothing till morning. As a great deal depends on prompt action I lost much precious time. In the morning, I found by the symptoms that what before I could only conjecture, was too true; that she had undoubtedly the murrain, one principal and certain evidence being the black appearance of the urine, which was nothing else than a quantity of blood of the blackest cast. Another was the peculiar filter of the dung which was in very small quantity for one day and afterwards entirely suppressed for precisely a week.

After finding this to be the case, I lost no time in procuring assistance of a neighbor who had some experience in the disease. He pronounced the cow as violently attacked as he had ever seen one, and immediately proceeded to business.

We took in the first place one quart of soft soap and one quart of hen dung, with a little pearl-ash. These were mixed with warm water enough to make it pour readily from a pitcher. This we poured down the cow. In about an hour from this we gave her about 1 pound of hog's lard melted, in which we poured about a table spoonful of spirits of turpentine. In about two hours more we repeated the dose. In about two hours after this, we gave three-fourths of a pound of salts.

My neighbor then directed me to follow up this until an operation should be obtained, but expressed doubts of success and returned home. I continued to give doses of salts at intervals of about two or three hours, but I added sometimes a spoonful of saltpetre, and sometimes spirits of turpentine. Next morning I found the cow alive, but no motion of the bowels. I gave her a quart of yeast, fearing to continue the use of salts, but finding no effect from it, in the course of the day, I resumed the salts, putting now sometimes a small quantity of rosin in place of the spirits of turpentine and saltpetre. On the third day I found her somewhat relieved from distress, and disposed to pick a little hay, and hoped she would now recover without more medicine, although there had yet been no action of the bowels. My neighbor, however, advised me to continue the medicine, and finding her next day failing, I gave her more salts with spirits of turpentine and saltpetre. I continued to dose her thus until I had given about six pounds of salts, and another quart of yeast, and on the evening of the sixth day, I gave her a strong decoction of hops, putting in about two handfuls of hops and giving tea and all forcing down even the hops. On the morning of the seventh day, I found her for the first time chewing her cud, the contents of her stomach having apparently been forced up faster than she could chew and swallow it, as a portion of the yeast which had been disgorged (and which had consequently been all this time lying in her stomach) was laying under her nose on the ground. Seeing this I felt assured that all was well, and in a few hours her bowels commenced their action, and she began again to eat, though slightly, and though much reduced in strength, I did not venture to give her any thing but hay. In the course of a day or two, I gave her a few boiled oats, and she is now strong and healthy.

I have been thus particular that your readers may judge for themselves, which of all this variety of medicine has done the effected cure. My own opinion is that the rosin, turpentine, and saltpetre, by stimulating the kidneys, have been the principal agents, the difficulty in my opinion being there, notwithstanding what may be said about leeches in the stomach, &c.

Most respectfully, &c.

W.

Sylvania, Lucas co., Ohio, Feb. 9, 1839.

PLANTING LARGE AND SMALL POTATOES.

Considerable diversity of opinion exists among farmers in regard to planting potatoes, whether the seed, which is put into the ground, should be large or small, cut or uncut. Some are of opinion, that, in order to prevent the seed or variety from "running out," large potatoes should be used; others will contend that small pieces and small potatoes will afford as good a yield as the large ones, and that being the case, it is much more economical to use them. The late Dr. Parker, of Gardner, once informed us, that he never had but one variety of potatoes in his life, and that he invariably planted one large sized tuber in the hill, and thereby prevented any deterioration of the crop. It would seem from theory that this would be the result, because the potatoe which is planted must of necessity afford nutriment to the young plant until its roots have

become sufficiently large and extended to draw its support from the earth. The more nourishment there is on hand the greater the crop.

Accurate and careful experiment, however, does not establish this as an invariable result. The following statement is from a friend in a private letter—Mr. D. is an excellent farmer in the eastern part of the State, and a close observer, does not seem to warrant the plan of using only the large potatoes for seed. "I have been," says he, "trying for five years to prove that large potatoes are better than small ones, and have for that length of time kept two distinct breeds, selecting the largest of the one, and small ones of the other for seed each year, thinking that they would degenerate, but cannot yet perceive any difference. The small breed this year yielded as many and as large ones as the others."

"The potatoe crop with us has been this year a pretty profitable one, although we had a small one; yet it turned out very well, as from an acre I got 260 bushels; of which I sold the merchantable, say about 200 bushels, for 70 cents per bushel."

After all, it would seem that much, if not the whole of the secret of obtaining a good crop, is the planting on a good soil and having a good season. The enormous yields that have been obtained the last year and the year before from the Rohan potatoe, is owing probably more to the good cultivation which was bestowed upon it, than to any thing so very superior in the potatoe itself. Our correspondent H. Prince, Esq. of Thomaston, demonstrated, not long since, by actual experiments, that the Rohan has not yielded in the hands of others more than the Quoddy blues did in his. But what we were going to observe was this—The Rohans, in every instance that we have seen, were cut and each eye planted by itself.

Although many experiments have heretofore been tried, in regard to this question, yet the facts are not generally known, if so well established as they ought to be. Our readers will find some experiments on this subject in Vols. 2d and 3d of the Maine Farmer, by "N." "Ploughboy," and "S. F. B." which throw much light upon it. By these experiments the cuttings are not so much behind the whole potatoes in yield as to make it much of an object to plant whole potatoes when seed is scarce.—*Maine Farmer.*

PRICE OF MULBERRY TREES.

There are but a limited number of mulberry trees in the United States, and every week some additional State is offering a bounty to encourage the silk business. The value of trees cannot therefore materially depreciate until the growth of this summer shall be thrown into the market. Foreign trees have nearly all arrived, and so poor and defective have they proved, that they have hardly paid freightage. The growth of last season in this country are on hand, but divided among a vast number of purchasers, a few designing to sell, but the larger number intending to use them for cultivation. The immense quantity which are growing in hot-houses and private buildings, now promise to add but little to the stock of trees, for in most cases they have proved total failures. Hot-houses prepared for the purpose, succeed well where they have an under heat; but in a room where there is only a warm atmosphere, the sap in the cuttings throw up a

beautiful top, but no root, and after that is exhausted they *droop and die*! This is the result of extensive experience here, and it will prove the same elsewhere. Hence there is every encouragement to purchase trees and to go into cultivation this summer; for if one tree, which costs \$1 now, will make one or two hundred trees next fall, even at a shilling apiece, will not raising trees be a lucrative business this season? But some people say trees are selling for a song in New York.—Defective trees are selling there constantly at a sacrifice, because they have sprouted or are badly frost-bitten, but good trees continue to sell at the highest prices. Mr. S Whitmarsh sold at private sale in New York last week, 1000 trimmed trees to go to Kentucky, for \$900 cash. This is demonstration.—*Northampton (Mass.) Courier.*

PUBLIC SALE.

Short-horned Durham and other Cattle, Horses, Hogs, Farming Implements, &c. &c.

On MONDAY MORNING, 24th March, at ten o'clock, there will be disposed of at public sale, at GOVANS TOWN, at the house of WALTER E. DYER, his own stock of Cattle and Farming Implement, and also a part of the stock of Cattle, Horses, Hogs, and nearly all the Farming Implements now in use on the farm called Lystra, the proprietor having sold his farm, is about retiring for the present from agricultural pursuits, viz:

One very superior full-blooded Short-horned Durham Bull, called Juniata, calved April, 1834, sired by Emperor, dam Flora, from Col. Powell's stock, a superior strain, pedigree complete.

One superior half Durham and half Irish Cow, dam said to have yielded 32 quarts of milk per day, now in calf by Juniata.

One superior seven-eighth Durham Cow, called Snowball, now in calf by Roderick, sired by Gloucester. One superior Heifer, fifteen-sixteenths Durham, sired by Roderick, dam Snowball.

Seven superior Cows, of country stock, now all with calf.

Four excellent strong Wagon Horses.

Thirty Hogs and Shoats, part of them of a superior breed.

One superior Boar.

One strong Road Wagon, broad tire, with a large close road bed, hay carriage and wood bed.

One Ox-Cart and Yoke, broad tire, one Basket Sleigh, two carts and Gears, one Market Wagon, one Roller, Italian Spring Wheat, Harness complete for four horses, Wheat Fan, Cutting Box, Corn Sheller, sundry excellent Ploughs, Cultivators, superior Horse Rake, Dirt Scoop, Quarrying and other Tools, one Patent Cutting Box, made by Sinclair & Moore, Scythes, Stoves, Picks and Mattocks, Hay and other Forks and Rakes, and a great variety of other implements, too numerous to mention.

Also, sundry articles of Household and Kitchen Furniture.

The sale will commence at 10 o'clock, precisely, if fair, if not, the first fair day thereafter, at the subscriber's residence, Govanstown. The attention of farmers, breeders, and admirers of fine stock, is particularly requested, as this sale will embrace many valuable articles worthy of their attention.

The terms will be made known at the time of sale.

WALTER E. DYER,
March 19, 1839, Govanstown.

MORUS MULTICAULIS.

The subscriber offers for sale 16,000 Mulberry Trees and 200,000 cuttings, warranted to be the genuine Morus Multicaulis. The trees are remarkably healthy and will be delivered at such time as will suit the convenience of purchasers. Orders (for not less than 100 trees) from the country will be promptly attended to.

M. POTTER,
fe26 46 South Charles street.

BY R. LEMMON & CO.

LARGE SALE OF MORUS MULTICAULIS TREES.

On WEDNESDAY, the 27th instant, at 11 o'clock, at the Auction Stores, on Frederick street wharf, 20,000 MORUS MULTICAULIS TREES.—These trees are in the very best possible state of preservation, having been tended and raised with great care. They are all securely packed in boxes, and the number of buds in each marked thereon. The counting having been done by sworn counters, every reliance can be placed in their correctness.

Terms of sale.—For all purchases under \$50, cash—all over that sum, four and six months credit will be given, to be secured by good notes with endorsers to be approved of.

SILK AGENCY,

Corner of E. and 7th streets, Washington City, D. C.

The subscriber having commenced an Agency for the purchase and sale of SILK MULBERRY TREES, and all articles connected with the growing of Silk, offers for sale the following varieties of Mulberry Trees at Baltimore prices, viz. Multicaulis, Alpine, Broussa, White Italian and Canton; also Mammoth White Silk Worm's Eggs, warranted to be of superior quality. All the recent publications on silk growing for sale, and subscriptions received for the various periodicals devoted to that subject.

FOR SALE,

A valuable FARM of prime soil, on the Western Run in Baltimore county, about two miles north west of the 14th mile stone of the Baltimore and York turnpike road, and at the same distance from the depot of the Baltimore and Susquehanna rail road, at Cockey's tavern, in a rich, highly cultivated and healthy tract of country.

This farm contains from 260 to 270 acres, having a full proportion in wood, much of which is building timber, peculiarly valuable in that neighborhood; is in the best state of cultivation; a considerable part in productive timothy meadow, and the residue of the arable land, not in grain, is well set in clover, the whole under good fencing, laid off into convenient fields, each of which is well watered. The farm has a large quarry of excellent building stone. There are on the premises an apple orchard of select fruit trees, which seldom fail to bear abundantly; a valuable mill seat on the Western Run, with a race already dug. There is no location in the country more favorable for a grist mill, having the advantage of a rich and thickly settled neighborhood, and a good public road leading thence to the turnpike road. Buildings substantial and convenient, being a STONE DWELLING, and kitchen of two stories; a large stone Switzerland barn, with cedar roof and extensive stabling below; large hay house and stable for cattle; stone milk house near the dwelling, with a spring of fine never failing water, with other out-houses. On the country road near the mill-seat a good house and shop for a mechanic, under rent to a good tenant. It is well known the lands on the Western Run are in every respect equal, if not superior to any in the county. Adjoining or near are the lands of Col. N. Bosley, Daniel Bosley, Thos. Matthews and others. The water power, with about 20 acres of land, is so situated that they may be detached and sold separately, without injury to the rest of the farm for agricultural purposes. Terms of sale will be liberal.

Apply to
NATHANIEL CHILDS,
on the premises, or to
WILLIAM J. WARD,

MOLAND'S IMPROVED SILK SPINNER.

The attention of Silk Manufacturers is invited to the recent invention of an improved Silk Spinner, by Mr. Harrison Holland of this town, for which he has obtained letters patent. It is thought to possess many advantages over any machine now in use for the same purpose. By its peculiar construction, it can be moved by hand, steam or water power,—and doubles, twists and spins the silk at one operation. For family use, or persons wishing to manufacture silk in a small way, it is undoubtedly the best invention in use, while it is equally well adapted for factories on the most extensive scale.

A machine in full operation may be seen, or for a more particular description of it, reference may be had to a Circular published by the subscribers, which can be obtained by any one upon application either to

HARRISON HOLLAND, or
STODDARD & LATHROP
Northampton, Mass. Feb. 27. mh 5 6t

POTATOES.

1,500 bushels POTATOES, from Portland, Main in good order for sale in parcels to suit purchasers by
WILLIAM CHILD,
mh 12 3t\$ No. 88 South Street, Bowly's st.

SPLENDID BLOODED STOCK FOR SALE.

The proprietor of Covington farm will dispose of the following fine bulls on reasonable terms, viz.

One bull two and a half years old.

One do. six months old.

of the improved Durham short horn breed; the dam of the first was got by the celebrated bull Bolivar; for size, form and beauty they are not surpassed by any animal in the state.

Three Devon Bulls, one of which is seven years old next spring, and the largest Devon in the State. The Devons are from the stock of the late Wm. Patterson, and of undoubted purity.

Two half Devon bulls.

Two bulls half improved Durham short horn, and half Devon.

One splendid bull, a cross of the Bakewell, Alderney and Devon.

One bull, half Alderney and half Holstein.

These fine animals may be seen at Covington farm, near Petersville, Frederick county, Md. on application to James L. Hawkins, Baltimore, or to
se 11 f FREDERICK FERT. Manger.

CHINESE MULBERRY TREES.

American Silk Agency, No. 95, Walnut st. Philadelphia?

The subscriber having opened a permanent Agency for the purchase and sale of all articles connected with the culture and manufacture of Silk in the United States, offers for sale all the different varieties of MULBERRY TREES, suitable for raising the SILK WORM; viz: Morus Multicaulis Alpinae, Brussa Multicaulis Seedlings, Morus Expansa, Multicaulis Cuttings, Improved Italian Trees, &c. Also, Cuttings from Norton's Virginia Seedlings, and Cunningham's Prince Edward GRAPE VINES. These vines produce an abundant crop of fruit, warranted not to rot or mildew and are fine for the table, and capable of yielding the finest wines.

S. C. CLEVELAND, Agent.

AGRICULTURAL IMPLEMENTS.

John T. Durdin & Co. encouraged by the favors shown them in the past year, are determined to offer no article to their friends but such as they can warrant, made of the very best materials, finished in a superior manner, of the newest patterns, and at liberal prices.

From John T. D.'s long experience in the manufacture of these articles he flatters himself that he can give entire satisfaction to those farmers, Commission Merchants, Captains and others who may favor him with their orders.

J. T. D. & Co. wish especially to recommend a lately improved and superior "Wheat Fan" as being admirably adapted to clean effectually and fast—price \$25. They invite the attention of the public to their stock of Castings for ploughs or machinery, by the lb. or ton at the lowest prices. Also on sale, New York ploughs, No. 10 1-4 at \$3, No. 11 1-4 at \$3 25, No. 12 1-4 at \$3 75. Repairs in general done with neatness and despatch.—any new machine coming into market may be obtained to order.

All orders for field and garden seeds, of the best kinds and fresh, will also be furnished at our Agricultural Establishment, upon the usual terms, by Thomas Denny, seedsman, Grant St. Baltimore, rear of Messrs. Dinsmore & Kyle. fe 26

CHILDS' PATENT SHAVING OR SHARPENING POWDERS.

As tranquility of mind is essential to the convalescence of the body, so will these powders prove from the usefulness and relief they afford to those who have to shave daily, and particularly dyspeptic invalids, whose enfeebled nerves are rendered more feeble by the least agitation.—Their use I strongly urge, and warrant their effect in producing feelings as agreeable and as soothing as an anodyne; and to those in health, instead of an irksome undertaking, the operation becomes a pleasurable pastime. I deem it my duty to recommend to the public this invaluable article, which may be had at the store of the inventor, No. 88 South Street, Bowly's Wharf:—James Gould, No. 136, Market Street:—or at Canfield & Brother's, South-East corner of Baltimore and Charles sts. X

Feb 19

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BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every MONDAY

	PER	FROM	TO
BEANS, white field,.....	bushel.	2 50	
CATTLE, on the hoof,	100lbs	11 00	12 00
CORN, yellow.....	bushel	85	86
White.....	"	83	
COTTON, Virginia,.....	pound	15	15½
North Carolina,.....	"	13½	14½
Upland,.....	"	14½	15
Louisiana — Alabama	"	15	16
FEATHERS,.....	pound.	53	
FLAXSEED,.....	bushel.	1 56	1 62
FLOUR & MEAL—Best wh. wh't fam.	barrel.		
Do. do. baker's.....	"		
Super How. st. from stores	"	7 50	8 00
" wagon price,	"	7 37	
City Mills, super.....	"		7 50
" extra	"		
Susquehanna,.....	"		
Rye,.....	"		
Kiln-dried Meal, in hhd.	hhd.	18 50	
do. in bbls.	bbl.	4 25	
GRASS SEEDS, wholes. red Clover,	bushel.	13 00	14 00
Kentucky blue	"		
Timothy (herds of the north)	"	2 75	3 00
Orchard,.....	"	2 00	2 50
Tall meadow Oat,.....	"		3 00
Herds, or red top,.....	"		1 00
HAY, in bulk,.....	ton.	12 00	16 00
HEMP, country, dew rotted,.....	pound.	6	7
" water rotted,.....	"	7	
HOGS, on the hoof,.....	100lb.	9 00	9 37
Slaughtered,.....	"	9 00	9 50
HOPS—first sort,.....	pound.	20	
second,.....	"	18	
refuse,.....	"		
LIME,.....	bushel.	32	33
MUSTARD SEED, Domestic, —; blk.	"	3 50	4 00
OATS,.....	"	43	45
PEAS, red eye,.....	bushel.		2 50
Black eye,.....	"		2 50
Lady,.....	"		2 50
PLASTER PARIS, in the stone, cargo,	ton.	4 25	
Ground,.....	barrel.	1 50	
PALMA CHRISTA BEAN,.....	bushel.		
RAGS,.....	pound.	3	4
RYE,.....	bushel.	95	1 00
Susquehanna,	"		none
TOBACCO, crop, common,.....	100lbs	5 00	5 50
" brown and red,.....	"	6 00	6 50
" fine red,.....	"	9 00	12 00
" wraperry, suitable	"		
for segars,.....	"	10 00	20 00
" yellow and red,.....	"	10 00	14 00
" good yellow,.....	"	10 00	15 00
" fine yellow,.....	"	12 00	15 00
Seconds, as in quality, ..	"	6 00	10 00
" ground leaf, ..	"	7 00	13 00
Virginia,.....	"	6 00	10 00
Rappahannock,.....	"		
Kentucky,.....	"	6 00	8 00
WHEAT, white,.....	bushel.		
Red, best	"	1 70	
Maryland	"		
WHISKEY, 1st pf. in bbls.....	gallon.	44	45
" in hhd.....	"	41	
" wagon price,.....	"		41
WAGON FREIGHTS, to Pittsburgh, ..	100lbs	3 00	
To Wheeling, ..	"	3 00	
Wool, Prime & Saxon Fleeces, ..	pound.	50 to 55	
Full Merino,.....	"	45 50	
Three fourths Merino,.....	"	40 45	
One half do.....	"	35 40	
Common & one fourth Meri.	"	35 40	
Pulled,.....	"	30 33	
POTATOES, 60 to 70 cts. a bushel.			

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,.....	barrel.		
BACON, ham, new, Balt. cured....	pound.	13	15
Shoulders,.... do.....	"	11½	12
Midlings,..... do.....	"	12½	
Assorted, country,.....	"	10½	
BUTTER, printed, in lbs. & half lbs.	"	31	50
Roll,.....	"	25	31½
CIDER,.....	barrel.	1 75	2 00
CALVES, three to six weeks old....	each.	5 00	6 00
Cows, new milch,.....	"	30 00	40 00
Dry,.....	"		
CORN MEAL, for family use,.....	100lbs.	2 00	2 12
CHOP RYE,.....	"		1 60
EGGS,.....	dozen.	25	
FISH, Shad, No. 1, Susquehanna,	barrel.	6 00	6 25
No. 2,.....	"		
Herrings, salted, No. 1,.....	"	6 00	6 25
Mackerel, No. 1, ———— No. 2	"	11 75	13 50
No. 3,.....	"	7 50	
Cod, salted,.....	cwt.	3 25	3 37½
LARD,.....	pound.	12	13

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

		VIRGINIA.
U. S. Bank,.....	par	Farmers Bank of Virgi. par
Branch at Baltimore,.....	do	Bank of Virginia,..... do
Other Branches,.....	do	Branch at Fredericksburg, do
MARYLAND.		
Banks in Baltimore,.....	par	Petersburg,..... do
Hagerstown,.....	o	Norfolk,..... do
Frederick,.....	do	Winchester,..... do
Westminster,.....	do	Lynchburg,..... do
Farmers' Bank of Mary'd, do	do	Danville,..... do
Do. payable at Easton,.....	do	Bank of Valley, Winch. par
Salisbury,..... 1 per ct. dis.	par	Branch at Romney,..... par
Cumberland,.....	par	Do. Charlestown,..... par
Millington,.....	do	Do. Leesburg,..... par
DISTRICT.		
Washington,.....	3	Wheeling Banks,..... 2½
Georgetown,.....	3	Ohio Banks, generally..... 3
Alexandria,.....	3	New Jersey Banks gen. 3
PENNSYLVANIA.		
Philadelphia,.....	par	New York City,..... par
Chambersburg,.....	½	New York State,..... do ½
Gettysburg,.....	do	Massachusetts,..... 1½a2
Pittsburg,.....	2½	Connecticut,..... 1½a2
York,.....	½	New Hampshire,..... 1½a2
Other Pennsylvania Bks. 2		Maine,..... 1½a2
Delaware (under \$5)..... 4		Rhode Island,..... 1½a2
Do. [over 5]..... 1½		North Carolina,..... 3a2½
Michigan Banks,..... 10		South Carolina,..... 4a5
Canadian do..... 10		Georgia,..... 5a5½
		New Orleans,..... 7a8

FRESH SUPPLY OF FIELD AND GARDEN SEEDS.

BY THOMAS DENNY, Ellicott near Pratt street, Baltimore, who has just received general supply of GARDEN SEEDS, the growth of 1838, part of which was raised by the first Seedsmen of this country, and a part imported, all of which will be sold wholesale and retail, upon the best terms, such as

GARDEN PEAS; Early and Late assorted Cabbage; Cauliflowers; Radish; Lettuce; Cucumber; Parsnip; Carrot; Onion; Rutabaga Turnip; Parsnip seed of all kinds, Garden Beets assorted; French Sugar Beet; Mangel Wurtzell, &c. &c. Also Field SEEDS, such as Early Sugar, Early White, Sioux, Chin or Tree Corn; Dutton, Baden and Twin Corn; Red Clover; Luzerne and White Dutch Clover; Timothy; Orchard; Herds; Millet; Tall Meadow Oats; superior Seed Oats; Spring Wheat; Spring Rye; Spring Barley; Seed Buckwheat; blue and Kentucky Lawn Grass, &c. &c.

Also GARDEN TOOLS, assorted sizes, and late improved patterns; Bird Seed of all kinds, Double Dahlias; Hyacinths, and Polyanthus, assorted, and selected for beauty and richness of colours, together with choice Flower Seed, assorted; Mulberry Trees; Fruit and Ornamental Trees; Silk worm Eggs; &c.; Agricultural Books; Silk Manuals; &c. Rohan Potatoes—Early Seedling do. &c. All orders by mail or otherwise will meet with early attention and dispatch, on the best terms for cash.

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AGRICULTURAL IMPLEMENTS.

THE Subscriber acknowledges with gratitude the liberal patronage he has received from the public since the establishment of his Repository in 1825.—During this long period he has studied successfully his own interest by identifying them with the interest of his customers in being prompt and faithful in the execution of their orders.

His present facilities of manufacturing agricultural implements, are not surpassed by any other establishment in this country, he can therefore afford them on as reasonable terms as any other person for the same quality of work. His present stock of implements are extensive both in quality and variety, to which he would invite the attention of those who wish to purchase.

A liberal discount will be made to all cash purchasers, and to those who purchase to sell again.

The following names are some of his leading articles viz His PATENT CYLINDRICAL STRAW CUTTERS, wood and iron frames, but all with his patent double eccentric feeders, with or without extra Knives, prices varying from \$33 to \$110, subject to cash discount, he challenges the world to produce a better machine for cutting long forage, Myer's WHEAT FAN and ELIOTT'S PATENT HORIZONTAL WHEAT FANS, both a very superior article. Fox & Borland's PATENT THRESHING MACHINES and Martineau's PATENT HORSE POWERS, also superior articles — A great variety of PLOUGHS, wrought and cast Shares, of all sizes and prices; Gideon Davis's improved PLOUGHS, of Davis's own make of Patterns, which are sufficiently known to the public not to require commendation; 100 CORN CULTIVATORS, also expanding CULTIVATORS, both iron and wood frames, and new plan; TOBACCO CULTIVATORS.

F. H. Smith's PATENT LIME SPREADERS, the utility of which has been made known to the public; together with a general assortment of FARMING IMPLEMENTS; PLOUGH CASTINGS of every description and superior quality kept constantly on hand at retail or by the ton; also, MACHINE and other CASTINGS furnished at short notice and on reasonable terms, his iron Foundry being furnished with the best materials and experienced workmen with ample machinery running by steam power for turning and fitting up machinery.

ALSO—Constantly on hand D. Landreth's superior GARDEN SEEDS;—In store POTATOES and common SEED OATS, TIMOTHY and HERDS SEEDS all of superior quality.—All orders will be promptly attended to.

JONATHAN S. EASTMAN,
Farmers' Repository, Pratt street,
Near the Baltimore & Ohio Rail Road Depot.

A SETTER FOR SALE.

The subscriber has for sale a thorough bred Setter, eleven months old. He has been but little hunted but gives indication of making a first rate dog. He comes of a strain remarkable for their fine performance in the field, and is a beautiful rich brown white in the breast and face. His price is \$30. All applications by letter must be post paid. fe 26 EDWARD. P. ROBERTS.

SEEDS, PLANTS, FLOWERS.



The subscriber offers for sale at his establishment a fresh supply of GARDEN SEEDS of the very best quality; those that cannot be grown in this country he imports direct from Europe from a source that can be relied on.

Besides a large collection of GREENHOUSE, hardy ORNAMENTAL TREES and Shrubs, Herbaceous Plants, and Bulbous Roots, and a choice collection of the very finest double Dahlias offered for sale, all on reasonable terms, wholesale or retail.

Also on hand a few bushels of ITALIAN RYE GRASS, with 100 bush. ITALIAN SPRING WHEAT, of the true kind. All orders for Fruit and Ornamental Trees, or any thing appertaining to his establishment will be strictly attended to, by JOHN FEAST, Florist & Seedsman, cor. of Lexington and Pine sts. ja 22 tf Baltimore.

Printing, executed at the Farmer & Gardener office, at short notice.

THE AMERICAN FARMER.

The proprietors of this paper have a few complete sets of this work on hand, which they will dispose of at the reduced price of \$50 a set. oct. 16 3

THE FARMER & GARDENER

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, E. P. ROBERTS AND SAMUEL SANDS—EDITED BY E. P. ROBERTS.

No. 48.

BALTIMORE, MD. MARCH 26, 1839.

Vol. V.

— THIS publication is the successor of the late **AMERICAN FARMER** and is published at the office, at the N. W. corner of Baltimore and North streets, over the Patriot office, at two DOLLARS AND FIFTY CENTS per annum, if paid within one month from the time of subscribing, or \$3 if after that time. All letters to be postpaid.

BALTIMORE: TUESDAY, MARCH 26, 1839.

Oyster shell lime as a manure.—We insert in another part of our journal to-day, a communication from Dr. Joseph E. Muse, on the efficacy of oyster shell lime as a manure. The subject is truly important of itself, but rendered doubly so when treated by a gentleman of such profound learning as our correspondent. Thanking the author for his polite response to our request, we commend his very lucid essay to the favorable attention of our readers.

A GOOD CROP—MORUS MULTICAULIS.

Last week the Hon. Josiah Collins, of Edenton, North Carolina, sold in this market a crop of *Morus Multicaulis* trees for THIRTY THOUSAND DOLLARS. These trees were the joint property of himself and the Hon. Ebenezer Pettigrew; and we do but sheer justice when we say, that there never has been as good a lot of trees in this market, nor do we recollect ever to have seen any, where so much well directed care had been taken, and judgment exercised, in their packing, as in this instance—"a bridegroom with his chin new reap'd" ne'er looked more comely in his lady-love's eyes than did those trees in our's; for as we viewed them, and admired the excellent condition in which they had come into our market, we could but peep, in anticipation, into that glorious future, when the offspring of those very trees, jointly with others, will bring about that healthful condition in the business and exchanges of our country, which is so much desired, and should be so dear to every patriot's heart, and for which we have been laboring with zeal for years: nor were we the less proud of these trees on account of the fact that we had sold to the first named gentleman, a part of the original stock from which he and his equally patriotic co-laborer had propagated the lot named above.

We have no personal knowledge of Mr. Pet-

tigrew, but from his enterprising character, and association with Mr. Collins, our personal knowledge of the latter, induce us to conclude, that the people of the lowlands of the Old North State, if required, like the Roman mother to produce them, might point in triumph to those two gentlemen, and exclaim, "these are my jewels;" for who are more justly entitled to distinction, than those who in their far-seeing vision look through the vista which conceals the future, and regardless of the sneers of those who cannot look beyond the present, become the pioneers in a great and holy work, which, by its benign influences, is destined to open new sources of wealth to the country in its national relation, and to unfold to honest industry the path which shall lead to competency and wealth.

TO MULBERRY CULTURISTS.

DIRECTIONS FOR PLANTING THE MORUS MULTICAULIS.

As the period has arrived when the *Morus Multicaulis* may be safely planted, I consider the occasion a proper one to lay down certain rules for the guidance of those who may not be acquainted with the several methods of their culture.

SOILS AND SITUATIONS.

A light sandy, sandy loam, gravelly loam, or light loam, are the soils best adapted to its culture; stiff ground or tenacious clays must be avoided, as also all low or wet grounds. The best situations are those that are *elevated* and *dry*, and the deeper the soil the better. Those grounds which have *southern* or *south-eastern* exposures are the best suited, for the following reasons: The mulberry requires both *sun* and *air* to ripen the wood, both of which essentials are best secured in the situations pointed out. They will grow in any situation, but I have always found that the wood matured with the greatest certainty when placed under the influence of these exposures.

DISTANCES.

If the trees are raised for sale—The distance should be either 4 feet by 3, 4 feet by 2, or 4 feet by 1½; the first will give 3,630 trees to the acre, the second 5,445, and the last 7,260. At either of these distances good marketable trees may be raised, but we question much whether closer

planting will not subtract more from the size of the trees than will be repaid by the increase of numbers arising from closer planting. At all events the rows should *not be nearer than four feet apart*; for as the trees increase in size, less distance than that will not admit of the passage of the horse to plough or harrow them, without endangering the limbs of the trees.

If the trees are planted for a permanent orchard—The best distance would be 8 by 3, or 8 by 2. Less than eight feet space between the rows will not conveniently admit carts between them to gather the leaves, which in the setting out of a permanent orchard should always be attended to, as it is a matter of the first importance. And while upon the subject I will remark that, if possible, all such orchards should be placed on a southern, or south-eastern exposure, and for this simple reason, the obvious propriety of which will strike every observer—the trees, thus placed, will yield foliage in the spring at least two weeks earlier than if situated on a northern or north-western exposure. The *Morus Multicaulis* tree, from an experience of years, we assert, whenever the wood is thoroughly ripened, to be as hardy as the oak, if planted on high, dry ground, therefore as *foliage* and not *fruit* is the object sought in their production, they should be placed in that position, of all others, the best calculated to encourage an early putting forth of their leaves.

TIME OF PLANTING.

The best time is as soon in the spring as you can put your ground in a state of thorough pulverization.

PREPARATION OF THE GROUND.

It would have been better that it had been ploughed last fall, as fall ploughing always conduces to the destruction of grass and weeds. But if you neglected so doing, take a piece of ground that was in root or corn culture last fall, which had been well tended and kept clean; plough it deeply; harrow it thoroughly—three harrowings will not hurt it; then roll it well, when, if your cuttings, layers, or roots, be ready, you may lay off your furrows, *north* and *south*, and proceed to plant.

MODES OF PLANTING.

By one bud cuttings. Cut up your branches

so as to leave *one* eye or bud upon each piece, and your cutting is prepared. The best method of placing them in the earth is to give them a vertical position, inclining the top of the cutting to the north at about an angle of 45 degrees, placing the bud so as to face the south: as you place the cutting in the earth press the soil around it firmly with the fingers and thumb, and draw a sufficiency of earth over it to cover it from 1 to 1½ inch deep.

Another method is to drop them in the furrow as you would corn, and cover with the hoe, pressing down the earth with the flat part of that instrument as you do so. This is the most expeditious plan, and if care was taken to place the bud or eye uppermost would answer well, and particularly where large transplantations are being made, as it would save much labor and time.

By double eyed cuttings. Cuttings with two eyes should be dropped in the furrows at the required distance, the eyes or buds uppermost, then covered from 1½ to 2 inches deep with finely pulverized earth or mould, which should be pressed down with the flat part of the hoe.

By Layers. By layers is meant, either the whole or part of either the main stalk or its lateral branches. I think myself that no layer should be longer than eighteen inches, and that, when the stalk is *thick*, not more than three joints should be allowed to each layer; and if these were judiciously split, so much the better, as each large joint if properly dissected would yield from two to four trees; but without the person attempting it knows his business he had better let it alone.

By Roots. The roots should be separated so as to leave one or two eyes or buds on the hard wood attached thereto. As the hand is about putting them in the ground he must with his hoe make the furrow sufficiently deep to admit the root so as to cover the buds about an inch or two, then press the earth around the roots with his feet, and his work will have been completed.

If it be designed to plant the root with a larger portion of hard wood attached, the person layering must be careful to make the *hole* which receives the root deep enough to admit the root being covered two or three inches.

Roots may either be planted flat or upright; but in either case the earth must be *pressed* firmly around them.

MANURES.

Almost any kind of manure will answer; but that which is well rotted is best. A compost

made of rich *mould* from the woods, and as *he* in the proportion of eight parts of the former and two of the latter is well suited to the culture of the Mulberry. If ashes be not convenient nine parts of mould from the woods and one of lime will be found to answer equally as well.

Stable, or barnyard manure, in the absence of other kinds, spread broadcast and ploughed in deeply, may advantageously be used. If the manure used be *long*, a few bushels of lime, say ten or fifteen to the acre, should be spread on the ground after it is ploughed, previously to its being harrowed.

Ashes from wood, bituminous, and anthracite coal, we have used with the best effects. If ashes be used, it must be spread on the surface after the ground is ploughed and harrowed in.

Bone dust, or ground bones, have been found an excellent manure for them; but before being used they should be mixed with ashes or good rich mould, in the proportion of fifty bushels of the first and ten cart loads of each of the latter, and suffered to remain in a heap for a day or two before being used, in order that the heat may be induced to pass off by fermentation. When thus prepared, the safest way to use them is to strew a small quantity along the furrows with the hand, and in covering the cuttings, layers, or roots, it will be well to avoid letting either come immediately in contact with the mixture.

Street dirt, the scrapings of roads, or, indeed, any *fat earth* will be found eminently useful, as the *Morus Multicaulis*, like the hog, is not particular as to its diet so you give it enough.

Lime. No matter what kind of manure may be applied, a few bushels of this mineral will be found a valuable auxiliary.

QUANTITIES OF MANURE.

Stable, barnyard manure, and compost of mould from the woods—twenty double horse cart loads per acre.

Ashes—150 bushels to the acre.

Bone dust and ashes—Two hundred and fifty bushels of the mixture to the acre.

Street dirt, scrapings of roads, &c.—Twenty double horse cart loads to the acre.

Plaster of Paris.—A bushel to the acre strewed over the plants after they are up and in leaf will prove serviceable.

Lime—Twenty-five bushels to the acre.

CULTURE.

The whole art of the culture of the *Morus Multicaulis* consists in keeping the ground entirely free from weeds and grass, and well stirred. As

soon as the mulberries make their appearance above the earth, and are distinguishable, a careful person should go through the patch and relieve them by *hand* of all weeds and grass. As soon as this is done let the *Cultivator* be run through the furrows so as to root up and destroy all noxious vegetation: when the work of the cultivator has been performed, let your hands, provided with good sharp hoes, go from hill to hill and perform the double operation of extirpating every vestige of grass and weeds, and lightening up the soil so as to receive the benefits of dew, sun, rain, and atmosphere. As often as the grass appears, destroy it with your cultivator or hoe. If you do this work early, you will never have occasion to use the plough, for the cultivator used at the *right time* will be sufficient. I will conclude by admonishing you not to work your *Morus Multicaulis* trees after the 1st of August, and beg leave to subscribe myself,

Your obt. servt.

EDWARD P. ROBERTS.

The Legislature of New Jersey has passed a law making it a criminal offence to steal mulberry and other trees. This reminds us that Maryland has not as yet done any thing for the silk culture, though as deeply interested in its success as any other State in the Union. Further delay in acting upon the bill may prove highly injurious.

PRESCRIPTION FOR A SWELLING.

Take a handful of the green leaves, or ½ oz. of the seed of *wormseed*; bruise and stew in vinegar; then add a sufficient quantity of the crumbs of stale bread to make the poultice large enough to cover the swollen part; and also a small quantity of sweet oil, lard or fresh butter. The poultice thus prepared must be applied warm to the part, and should pus or matter not be formed, it will stimulate the absorbent vessels, enable them to perform their offices, and give prompt relief. It is the best application for all kinds of swellings we have ever tried, and is particularly happy in its curative effects in the swelled breasts of suckling mothers, never failing in a single instance when used in time to discuss the swelling and prevent gathering. This simple prescription is worth all the nostrums of the books. In saying this we speak from a practical knowledge of its wonderful powers, and we enjoin it upon our brethren of the editorial corps to copy it for the benefit of suffering humanity.—*Editor Farmer and Gardener.*

Let no farmer who can raise the means omit to plant *Morus Multicaulis* cuttings this spring—*Now is the time.*

For the Farmer and Gardener.

CAMBRIDGE, Md. Feb. 27, 1839.

E. P. Roberts—Dear Sir—I have seen in your valuable paper an editorial request, “that such as may have used lime from shells, will favor the public, through your columns, with results,” &c., and you most truly add, “the subject being one of deep importance to a very large portion of the agriculturists of the country.”

Your request, it seems, is particularly elicited by a communication signed “Subscriber,” on the effects of *oyster shell lime*, rather discouraging.

I am pleased to find, upon reading the communication referred to, that the author acquits you of coincidence of opinion with him—in other words of being a “particeps criminis” in this very singular offence against experience, reason, and I might add, against the laws of nature herself.

I had flattered myself with the possibility, until I had read the paper, that in your multifarious avocations, you might have misconstrued it, but I found on the perusal, that no other meaning can be forced upon it, than that *oyster shell lime* has no efficacy as a manure.

By what process has your author arrived at this conclusion against *oyster shell lime*, as a manure? Inasmuch as it is in hostility with competent testimony, in Europe, as well as America, it should, if intended to operate on the agricultural interests of the country, have been very particular, very strong and conclusive.

Nous Verrons:—In 1832 he made “a compost of equal parts of *oyster shell lime* and *rich earth*, collected from fence rows,” and “the result was exceedingly favorable”; but, he is “convinced, it was partly owing to the *rich earth*, and *deep ploughing*.”

Of the truth of this conviction, the warmest advocate of lime from shells, or stone, can entertain no doubt.

It never has, to my knowledge, been contended, that lime, of itself, without other manures, as well as good culture, was sufficient to consummate the best wishes of the agriculturist, in “favorable results.”

Any two kinds of manure, not incompatible in their nature, made into a compost, and used, may, each of them, be very reasonably supposed, to have contributed “partly,” to a “favorable result:” but yet, this affords no argument against either; and in the conclusion, your author draws from it, against *oyster shell lime*, he is palpably guilty of a *non sequitur*.

In the spring of 1834, your author spread about four thousand bushels of *oyster shell lime* on twenty-four acres, or about one hundred and sixty-seven bushels per acre, and without effect on his corn, or timothy; he does not say whether the land was rich or poor, light or stiff, wet or dry: if poor, and light, the quantity, by my experience, was about three times too much; and no benefit, but, rather an injury might have been expected: if wet, even though rich, no advantage should have been anticipated by the general consent of mankind.

In 1837 he applied one hundred bushels to the acre, and had no effects from it; and throughout all his reports, as well as this, he names none of the conditions under which this, or any of them were made, and from a knowledge of which, only, fair conclusions could be drawn, from his, or any other experiments: and from his omission of these accompanying circumstances, which are essential to a due appreciation of his several and unfortunate results, in their bearing upon the subject in question, no validity can attach to his objections, founded upon them, against the use of *oyster shell lime*, under suitable conditions; and the inference is reasonable, that the author not having made himself acquainted, by a previous practice, or study of this subject, was not himself apprised of their necessity, for his experiments, or reports; and consequently, that he really did not call in their aid on either occasion, to authorize the expectation of “favorable results” which are experienced by others.

From his particular designation of *oyster shell lime*, it is taken for granted that your author means to discriminate in favor of *stone lime*.

Upon this discrimination, I will make a few remarks, because I have found, that a preference has been frequently given to *stone lime*, over *shell lime*, though I never before heard the opinion, that *shell lime* had no effect.

The idea of the inferiority of *shell* to *stone lime*, I repeat, is not unusual; but I maintain that it is erroneous, as it regards either mortar or manure.

I maintain, though against fearful odds, I am aware, that *oyster shell lime* is superior to *stone lime*, for both mortar and manure, or for any purpose for which “lime” is used.

By a frequent analysis of *stone lime*—and during the last fall in particular—of a parcel, which I had purchased, at the highest price, and said to be of the best quality, I have found, from thirty-three to thirty-six per cent of “*fine silicious sand*,” whereas the *oyster shell lime* is nearly pure, having only two or three per cent of “*animal carbon*.”

These facts are unquestionably true; and may be tested; or open to all who doubt: and, they establish this truth—that a given weight of “lime” from *oyster shells* contains nearly fifty per cent more of the pure substance, than the same weight of “lime,” from the *stone*, contains: that is, by so much the purer is the lime obtained from *oyster shells* than that from *stone*.

But, “lime,” “gold,” “silver,” “copper,” and all bodies in nature, are identified, valued, or depreciated, by their respective, natural, inherent properties. It would be absurd to say, that “gold” obtained from one ore, was inferior to that obtained from another kind of ore; from whatever source derived, the properties of the metal will be the same; and equally unquestionable, is the truth with “lime.”

But it may be said, that admitting the natural, inherent properties to be identical, yet there are accidental, or acquired properties, which may increase, diminish, destroy, or, in some way, alter the substance, materially.

It is clear, that both the kinds of lime in question, are liable to this influence; yet take them—*ceteris paribus*—*oyster shells* and the *stone*, each prepared in the same manner, and with the

same care, and they will produce “lime,” having each the same identical properties, though more or less alloyed with foreign matters; and the difference of purity will be in favor of the “shell,” as before stated, by nearly fifty per cent in similar weights.

Theoretically, then, it would seem, that no question can be entertained on the subject; and in fact, that *oyster shell lime*, is really preferable to *stone lime*, inasmuch as it is purer.

Practically, I think, that the heterodoxy of your author is equally concluded; and that whatever may be the properties of “lime,” they will be found, to develop themselves, in equal degree, under equal circumstances, be its source what it may.

Common experience teaches that lime of any kind, which has been *air slaked*, or, in other words, which, from exposure to the atmosphere, has become a carbonated hydrate, is unfit for mortar.

The same experience has taught us, that *shell lime* is carelessly prepared, and as carelessly exposed, in common practice, by farmers and others, for many months, for occasional brick work, when at leisure; whereas, the *stone lime* is carefully made in well constructed kilns, and immediately barrelled for future use: hence, its superiority for mortar, generally acknowledged: reverse these accidents, and you will reverse their characters.

This accidental, or artificial superiority of the *stone lime* for mortar, has given rise to its superior reputation for strength, in general; and it is a vague, erroneous idea, not founded in nature, but in art; or rather in a want of art.

One of the most sagacious and experienced masons in Baltimore, confirms the preference of *shell lime*, over *stone lime*, for mortar; that it is better, and as he termed it, it will go further, if well made, and preserved; and he must be correct, because, as before stated, it contains nearly fifty per cent more of “lime,” by weight: by volume, the disparity would be much less, because the foreign matter of the *stone lime*—“*silicious sand*”—is heavier than that of the *shell lime*—“*animal carbon*”—and many more pounds would be found in a bushel of the former, than the latter; and thus by the difference of their specific gravities the disparity would be reduced—that is, it would be less, by the bushel, than by the pound.

For the purpose of manure, the carbonate, a state which lime soon acquires by exposure to the air, and the one, in most instances, the most suitable, the preparation, if it be well burnt, and protected from water, is immaterial; and the two kinds in question, must necessarily exert equal energies in the ratio of their purity; and subject also to the conditions of their application, with this difference, only, that the *animal carbon*,—the impurity of the *shell lime*, is superior, as a manure, to the *silicious sand*,—the impurity of the *stone lime*.

You ask for experimental results, &c.:

I have used *oyster shell lime* as a manure, upon various denominations and conditions of land; at first indiscriminately, until taught otherwise by my experience, and that of others, among whom stands most prominently, Mr. E. Ruffin, the author of perhaps the most valuable essay extant,

on "Calcareous Manures," where science teaches practice, to wit: That upon wet lands it is labor lost to apply it; upon others, that it should be varied in proportions; in my opinion from one hundred and fifty to thirty bushels per acre, graduated by the equivalent matters on which it may have to act.

I will finally remark, again, that I have for many years—with a *continuando*—used oyster shell lime, as a manure, on an extended scale; and have experienced from it, the most favorable results, a detail of which would fill your paper unnecessarily.

Unfortunately, we have in Dorchester but few shells, in comparison with the demand; no limestone, and no marl. My chief supply of shells is obtained from Baltimore, with much cost and trouble, for which I am amply remunerated.

You will be so kind as to pardon the length of my paper, occasioned by a general view of the subject, not intended when I commenced it.

As the purport of your request, is to collect evidence, "on a subject, (as you truly express it, of "vital importance"; and, as *anonymous* evidence cannot, in the nature of things, though perfectly true, be *available*, in any case, I will add,

I am, respectfully,

JOSEPH E. MUSE.

PHILADELPHIA, MARCH 21st, 1839.

EDWARD P. ROBERTS, Esq.

Dear Sir:—On referring to the Farmer & Gardener of the 1st inst. and to the concluding paragraph of my memorial to Congress, you will perceive that you have unintentionally done me great injustice; and, on re-examining the memorial, you will perceive that I have cautiously avoided "making a stipulation as a price." I have always refused to name any "price." On the other hand, I have said to members of Congress, that, whenever Congress will fix upon a "price" which that body deem a fair compensation according to the value of the discoveries, I will instantly publish to the world what the discoveries are, and trust to some future Congress to pay the amount after the public shall have proved the discoveries to be as represented by me.

Giving satisfactory reasons, why it would be for the public good, to pay a large amount, say, less than one hundredth part of the value; or, stating that a mere brokerage or commission, without any of the capital or interest *would satisfy me*; I conceive to be a very different thing from saying, that such brokerage or commission is my "price." When I set a "price" upon an article, I generally ask its *full* value; and, when I intend to take less than its value, I say, what will you give?

A member of Congress said to me, "Alabama will give you a million of dollars to keep the insect from the cotton plant."

North and South Carolina, I am informed, gave \$90,000 to the HEIRS of the inventor of the Cotton Gin, a valuable machine. The inventor, I am told, died penniless. So far as these two States are concerned, I have acknowledged that a less amount would satisfy me. And I now state that I will take any amount that the STATES choose to offer, upon their own terms: and when any one of them shall have offered a premium or

made an appropriation for such discoveries as, by members of the United States Senate from about one half of the States, I prove I have made; I will then commit my discoveries to paper, to prevent them from being lost to posterity. I conceive that a comfortable livelihood is of more consequence to me than the monuments of future ages.

I have the pleasure of being,

Your sincere friend,

RUSSELL COMSTOCK.

VEGETABLE PHYSIOLOGY AND THE CULTURE OF FOREST TREES.

The following correspondence, which we have been permitted to publish, contains some interesting facts in relation to Vegetable Physiology and the culture of forest trees.

Hampden, Penobscot Co. Maine,

May 14, 1838.

GENERAL DEARBORN,

DEAR SIR—Having been much instructed by your letters on planting forest trees, recently published by a committee of the citizens of Bangor, who are at this moment, you know, all alive to the subject, it has occurred to me that I may venture without any especial introduction, to communicate to you the details of some very recent observations in relation to the form and growth of our forest trees, which I believe to be new, and possibly entitled to a more extended examination than may be made on this or any other single position, assured that, if nothing interesting shall be found in them, I may find an apology for the trouble of this letter in the motive which has induced it.

The fact that the trunks of our trees, especially the lower portion of them, are not cylindrical, but elliptical is, I suppose, familiar with every one in this timber growing, and timber cutting country.

But that these ellipses are *parallel with each other*, and that this form and this arrangement are not the consequences of accident, or of local and partial, but of causes constant and uniform in their operation, are truths, which, as far as I know, have thus far escaped the notice of horticulturists and others curious in these matters.

Measuring last week, a row of Elms planted in 1820, for the information of a friend in Bangor, I observed that the trunks were not only elliptical, for this I had frequently noticed, but that the ellipses were parallel, and that the course of the longest diameter was about 30° to 33° east of south and west of north, on the true meridian, and that the southeasterly curve was the *quickest* or more elongated than that on the opposite side.

As the form of these trees might possibly be affected by their too close, or crowded positions, in the row which is east and west, I proceeded to measure a large number of trees of various kinds, some of them standing in open ground, others in a thick grove, and others on the margin of the thick wood with open ground on one side only. In these various situations, the trees were taken promiscuously, rejecting only such as were misshaped by accident. No difference material to the principle could be perceived, either in the form or in the direction of the ellipses.

It is important here to remark that the largest roots and most thrifty branches are evidently dis-

posed with reference to the longest diameter of the ellipsis—the strongest and most extended of these to the southeastward.

The form of the trunk, then, is very clearly referable to the disposition of the principal roots and branches and is a necessary consequence of the reciprocal action of these upon each other. But why this peculiar and uniform disposition of the roots and branches, is an enquiry not so readily answered. And should it be deemed worthy any farther pursuit, I beg that the following circumstances may be kept in view.

The line of the ellipses is nearly perpendicular to the line of the sea coast. It is also nearly in a line with our most violent southeasterly winds, and not many degrees from that of our northwesterly.

It is a very familiar fact that our rivers and water courses have a decided influence upon the trees in their vicinity, inducing an unusually abundant and vigorous vegetation on the water side. How far the humidity of the sea, combined with the general warmth of the morning sun, may influence *one side* of trees, at a distance of 20 or 30 miles, I will not undertake to conjecture, but while I do not presume to give any precise value to this circumstance, I think it worth keeping in view in any farther investigation, till farther observation shall determine.

That the strong winds alluded to, by constantly, or very frequently, agitating the tree and trying its strength, should induce corresponding efforts to resist their force and to extend its supports, enlarge its trunk in the line of assault, and lessen the volume of branches and foliage in the lateral directions, so as to prevent the least possible surface to the action of the assailant. All this is very intelligible, because it is in accordance with the uniform operations of nature. But if this were the sole cause of the phenomena in question, it were difficult to understand why these arrangements should not conform more exactly with the almost uniform current of these winds. If however the causes suggested shall be found to unite their slightly varying forces to produce the effects, it will be seen that they respectively modify without overcoming each other. The direction of the ellipses, is in a line inclining from the perpendicular of the coast, towards the line of the S. E. and N. W. winds, but coincident with neither.

Most respectfully, Sir,

Your very obedient servant,

JEDEDIAH HERRICK.

This table shows the greatest, the least, and the average difference of diameter in the order expressed, the difference being a proportion of the longest diameter.

20 Elms, 1-5 1-28 1-11 of the longest diameter.

15 Oaks, 1-7 1-30 1-15 " " "

9 Firs, 1-6 1-46 1-25 " " "

4 Birches, 1-5 1-9 1-7 " " "

4 Baswood, 1-5 1-11 1-7 " " "

3 Beaches, 1-8 1-12 1-10 " " "

3 Hemlocks, 1-12 1-18 1-15 " " "

4 other Hemlocks were found to be nearly cylindrical.

Hawthorn Cottage,

Roxbury, May 16, 1838.

DEAR SIR—I am extremely obliged to you, for

the very interesting facts, which you have so kindly communicated, in relation to the contour of the trunk and the extension of the branches and roots of forest trees. They were new to me, and I do not recollect to have seen any allusion, in the works on botany and vegetable physiology, to the elliptical form of the cross section of the main stem, which from the statement you have made, appears to be universally the case, and to have been long and generally known, to the "timber-cutting" citizens of Maine. The cause of that peculiarity seems, however, to be sufficiently apparent. You state, that the longest diameter of the ellipse is in a direction from north 30° to 33° west, to south 30° to 33° east; and that the branches and roots, as well as the elliptical section of the tree are elongated, in a southeasterly direction.

Now, it has been established, by experiment, that a south-easterly exposition is the most eligible for the fronts of green-houses, as that affords the best opportunity to the plants for receiving the earliest morning rays of the sun, and for enjoying them for the longest period, and especially, at those seasons of the year, when their vivifying influence is most required and congenial. The line, therefore, which has been found preferable to all others for the facade of green-houses, or the direction of such walls, as are intended to favor the growth of fruits and other vegetables, is very nearly perpendicular to that, which nature, it seems, has so remarkably indicated, from the manner in which forest trees are disposed to extend their vegetation.

Every person who has resided in the country must have observed, that on the south-easterly slopes or sides of hills, embankments, ponds, rivers, streams, buildings, and close fences, vegetation commences sooner in the spring and is more actively kept up during the season, than in any of the other exposures.

But there is another cause, besides the more direct effect of the solar heat, which powerfully aids vegetation, in such position,—the protection afforded by the various artificial and natural barriers that have been named, against the cold and blighting north west winds, which have such a deleterious effect on all kinds of plants, as well as rendering our winters so terrifically rigorous, our springs so backward, our autumns so premature, and so many days, of even our summers too cold for the complete fructification and maturity of nearly all the vegetable productions, which are objects of attention to the farmer and horticulturist. The vast regions of perpetual ice and snow, which extend from the pole towards the borders of the United States, with the mighty range of the Rocky mountains, towering into the heights of uninterrupted congelation, and the lateness of the period when the ice and snow disappears from the great lakes, and immense forests reaching within even our own bounds, have a direct and powerful tendency to render the north-western wind, the most prevalent, at least, throughout New England, and all the states and territories which extend westward, from the Hudson, to the base of the Rocky mountains; and which are so fatal to the hopes and labors of the cultivators of the soil. The latter therefore have endeavored to guard against their withering and destructive ravages, by structures of various kinds, as well as to invite the first

beams of the sun, to smile upon their cherished families of the vegetable realm.

Have not the forest trees made a like effort and are not the results in harmony with these well established principles? Vegetable physiology has made great progress within the last half century; and more recently, the laws by which it is regulated, have been clearly illustrated, by numerous experiments in England, France and Switzerland. A tree is now considered, by the most able and distinguished writers on this subject, either as an *aggregate* of as many *distinct plants*, as there are *buds* on its branches, or as *one being*, analagous to what is called, when speaking of animals, an *individual*; but in both cases, the mode of nutrition and increment is the same. The elementary substances being liquified are conveyed in the sap through the alburnum, and exposed to the light, air and heat of the sun, on the upper surface of the leaf, where are exhaled those vapors and gases which are not conducive to the health, or support of the plant, and others elaborated, or inspired from the atmosphere indispensable to the formation of wood, bark, fruit, gums, rosins, oils, aromas and saccharine or other matter peculiar to the several species, which are transmitted by the returning circulation, that commences on the inferior side of the leaf, and descends in such a manner in the cortex, as to create through the medium of the cambium, all the ligneous and other parts and substances, which have been named.

As these vessels, which like the arteries and veins in animals, conduct the sap, from the spongioles of the roots to the highest leaf, and bark, through the cortex, are separate and independent, for each bud, throughout the whole extent of the tree, as so many isolated plants, those which are most favorably situated for receiving the earliest and greatest portion of heat and light, will be the soonest in active operation, and continue to exercise their functions, for the longest time, during each day and from the dawn of spring, until the autumnal frosts terminate all vegetation in the foliage; consequently the roots and branches, as well as the side of the trunk, on which those vessels are arranged, will increase faster and for a longer period, and thus produce results, which you have actually verified. Besides the trunk of the tree is, itself, a thick and impervious wall to protect the sap vessels and other parts of vegetation, of each bud belonging to the south eastern side of the tree, from the blasting winds of the north west,—while it is also a vast combination of delicate pipes which are constantly conducting heat from the earth, that grand and inexhaustible reservoir of caloric, and distributing it throughout the whole mass, and to the end of the minutest twig, whenever the temperature of external air is below that of the earth, or the surface of the latter is frozen, but not so deep, as to reach the extremities of all the roots.

The theory I have attempted to establish has been based on the facts presented in your letter, and the practical operations of the cultivators of the earth, as well as the accredited principles of vegetable physiology, the known effects of heat, light and air on plants, the characteristics of our climate, and the general laws of nature in all her wonderful works; but whether it affords a satisfactory explanation of the phenomenon, which you have been the first to announce, I am not

sufficiently confident to affirm; and have presented it, rather, with the hope, that others, more competent, may be induced to make greater researches, and give the subject that thorough examination which it so eminently merits.

I am ever highly gratified in becoming acquainted with those, who have a love for trees and a taste for their cultivation; it is therefore pleasing to have commenced a correspondence, on a subject of such congenial interest.

In a country so eminently favored as this, by the vast number of the beautiful and magnificent varieties of trees which embellish our forests, compared with those which are indigenous to Europe, it is not a little surprising, that a deeper interest has not been developed, for rendering them tributary to the health, comfort and pleasure of the people, by considering them as indispensable to the completeness of a country residence and the public edifices, squares, grounds and highways, as are any of the appendages, which are deemed useful, ornamental or agreeable in either.

It is time that some portion of the population should begin to plant, and foster trees, and not all continue united with those, who are for the indiscriminate destruction of our superb native groves. When I resided on the banks of the Kennebeck river, as a boy, the county of Kennebeck was as much a wilderness and lumbering region, as any on the waters of the Penobscot river; but so reckless and wide spreading has been the devastation of every variety of tree, and in which work of repentance, the farmers have been so actively conspicuous, that many of them are now obliged to go many miles for their fuel, and pay a high price for it. These lessons of sad experience should not be neglected; and the gentlemen of Bangor, who have with such commendable zeal, formed an association for ornamenting that young and thrifty city, with trees, appear determined to leave honorable memorials, that they have not been either heedless of the errors of the past generations, negligent of the interests of the present, or indifferent to those of the future.

Such demonstrations of an enlightened and munificent public spirit are worthy of all praise; and may their meritorious example induce the citizens of all our towns, to exclaim, with the determined energy of the venerable Evelyn, "LET US ALSO RISE UP AND PLANT."

With great esteem,

Your most obedient servant,

J. HERRICK, Esq. H. A. S. DEARBORN.

[From the Southern-Carolinian.]

CULTURE OF COTTON.

LOCUST GROVE, Abbeville Dist.

MR. EDITOR:—I have searched in your agricultural calumns, but in vain, for some article on the culture of Cotton. Are our planters not aware of the paramount importance of this production of our country? Or is it taken for granted that every person knows how to raise it? So every person knows how to fatten pigs. But there are improvements, and these improvements should be disseminated, for the benefit of all. Cotton is the chief source of the wealth of the Southern States, and contributes largely to the comfort of millions of the human race. We cannot improve in the culture of it too much. I

would not recommend that we should raise more than we do; but with care and attention, the same quantity may be raised on much less ground, by which our lands would not be so soon exhausted. Land is the only real wealth of our country, and it is surely unpatriotic in the people, to destroy or waste it. It is impoverishing their posterity.

What is there worthy in a man's accumulating a considerable fortune, if, in doing this, he has laid waste more land than would support his posterity for generations to come.

Cotton seed should be procured from the best ground, where the cotton has been well worked, and the bolls fully matured, gathering, for this purpose, the middle bolls: that is, separating the first opening and the last, from the second. The first bolls become grown when the stalk is young and not prepared to give to the seed that perfection which it does in a maturer growth. The last opening is generally immature, from the decay of the stalk, cold winds, early frosts, &c. That which is intended for seed, should be picked out when dry, and never allowed to heat, or ferment, which would occasion a decomposition of its parenchyma, and a predisposition to rot while growing. This partial fermentation of the seed will not prevent its germination; but its nourishing principle being injured, the young plant will not have that constitutional vigor, so essential to perfection in growth, but will be susceptible of all the disasters incident to the cotton crop. It is equally as important that we should extend a care to the preservation of our seed, as to the preparation of the soil. A defective seed cannot bring a perfect plant. The more pains we take with regard to the preservation of our seed, the less will be their degeneracy. The land should be thrown up in beds as early as possible with a turning plough, which will hasten the decomposition of its vegetable matter. Low moist land should be drawn up with the hoe, but no other. Some people contend for a rigid system of management, as to the time and manner of planting and working a crop; but, as there is no regular time or way of managing, which will suit the precarious seasons of our climate, all plans must be modified according to circumstances.

There is a prevailing opinion among planters, that the sooner cotton is planted, so that it is not killed by frosts, the better. This is an error of considerable magnitude. If experience did not prove to the contrary, we should need no better evidence, it seems to me, than to know that the cotton plant is a native of a warmer climate than this. In Florida, the West Indies, and Mexico, where there are no chilling winds or frosts to stunt its growth, cotton grows to greater perfection than in Carolina or Georgia. Cotton ought not to be planted until there is evidence of a permanent change from cold to warm, which time every man's experience will dictate. Cotton will then come up and grow off sooner than that which has been injured by frosts, or cold winds. Before planting, the seed should be rubbed in ashes moistened with water. This will cut the lint, so that the seed can be cropped more regularly. And the ashes which stick to the seed are highly beneficial, as they impart their alkaline qualities to the young plant, and accelerate and give vigor to its growth. Some planters rub their seeds be-

fore planting in lime; but I prefer ashes, because its inherent principle, (Alkali,) is not only a stimulus, but a nourishment also: Whereas, lime is only a stimulant, and might, in some instances, engender want. Ashes have a two-fold advantage. They give a healthiness to the young plant, and an impetus to its growth, which renders it less susceptible of the influence of circumstances.

After the cotton is up, a scraper should be run round, if the land is bedded. This will not throw the soil down, and leave the cotton standing on a narrow ridge, which would impede the progress of the hoes, in chopping out. The cotton should be left in bunches of three or four stalks at a place—the distance, suitable to the strength of the ground, not putting it to an entire stand until the second time. A great deal is often lost in the cotton crop, by its being too close in the drill. The stalks should stand at such distance as at all times to admit the sun to shine through upon the ground. It is the genial warmth of the sun, with a free circulation of air, that causes the cotton to bear, mature, and open. After chopping out, the cotton should be run round with a turning plough, the bar next the cotton. This throws the soil to the middle, covers the young grass, and admits the warmth of the sun to the roots of the cotton; but it should not stand long in this condition, before it is run round again, with one or two furrows, throwing the soil back to the cotton. It is then in good condition for the second hoeing. In hoeing the second time, the cotton should be put to a perfect stand of one stalk. Those which are to be removed, should not be chopped off with the hoe, but should be pulled up with the hand. This is the speediest way, and the most practicable, as there is no danger of bruising those which remain. It has been shown by experiment, which is better than all the theories that can be adduced, that one stalk at a place, giving it the proper distance, will bear more and better cotton than two stalks or more. And this is not at variance with the theory of the times; for two stalks cannot draw more matter from the earth, than the earth will yield to one, but on the contrary will exhaust the earth of those ingredients material to the formation of the cotton, which is the ultimate purpose of the cotton planters. And no planter will deny that there is more efficacy in a perfect plant, than one that has been bruised, mutilated, or wounded, in any way. Its transpiration is free and unrestrained; no waste of its juices, their renovating principle being carried out to their ultimate perfection. We may attribute, and very correctly too, the barrenness of some stalks to the wounds and bruises which have been inflicted, when young, either upon the stalk, or about its roots. And might we not, with equal propriety, view this as one of the causes which hasten the degeneracy in our seed. Could we but view scientifically the progress of the cotton plant, from its germination to maturity, and see the analogy of its constituent parts, we would see that a perfect growth is necessary to the perfection of seed. Then surely it would be prudent in every planter to use these necessary plants; they require no more time, and would evidently increase the quantity upon the ground. And the purity of the seed would be a great desideratum in the next crop.

The third working should be given with as

much or more care than the second. The roots are then spreading in every direction, and the stalk is in a good way of bearing. There is a universal practice among some planters, in the third, and in the last working, to plough deep and bed up high. This is an error which is attended with inconceivable injury. Every experienced planter knows that there is the bulbous or large root, that strikes perpendicular and deep into the ground, and the fibrous or small roots, that run horizontally immediately under the surface of the ground. The office of the latter is to seek for nourishment, which is essential to the support of the bolls. The main root, which strikes into the ground, collects moisture, and supports the stalk. Now what must be the result of cutting those fibrous roots with the plough, in dry weather, or at any time, for we have no warranty of rain? The consequence must be a dropping of the bloom, and a barrenness of the stalk, until rain come again, that the roots may take a fresh start to grow. Or even if the ploughing should not be of sufficient depth to cut the roots, the soil is drawn off with the hoes, in piling it round the stalk—the earth dries to its usual depth, and these roots are exposed to the burning rays of the sun. I have seen the effect of this so strong as to fire the lower leaves of the stalk.

Another attenuative consequence of the high bedding system, is, that the cotton derives no benefit from light showers. The water inclines to the middle, and runs off or evaporates, and does the cotton no good. Nothing short of a thorough wetting rain will do any good.

Perhaps some one would enquire, am I totally opposed to the bedding system? I would answer, there is a medium in all things. Every virtue carried to excess, becomes a vice. A broad flat bed would serve the requisite purpose. My plan is to run round with a broad scraper. This runs immediately under the surface, destroys the small grass, and neither tears down or throws the bed up higher; and with one or two furrows, with a turning plough, to split the middle, then, if necessary, draw from the middle furrows, with the hoe, a little of the soil, depositing it on each side. This answers the double purpose of shading and accumulating moisture about the roots of the cotton, and absorbing more water during light showers. Whereas, the high beds lose more moisture even in dry weather, because evaporation goes on from the surface of the ground. The surface being increased, of course evaporation is increased.

It may be thought that these little cares and pains are too trivial and unimportant to compensate for the additional trouble. But if there is any thing in three years experience and observation, I am prepared to say that they amply repay for all this additional trouble. "Without pains, there are no gains, as poor Richard says."

ROBERTS' SILK MANUAL.

In Pennsylvania House of Representatives on Wednesday, Mr. GORGAS, from the committee on agriculture, made a report, which concluded with a resolution recommending that the Clerk be authorized to purchase fifteen hundred copies of the Silk Manual, published in Baltimore by E. P. ROBERTS, for distribution among the people of the State. The resolution was adopted.

Blight in Grain caused by Barberry Bushes.

—We find a strong confirmation of the correctness of Sir Joseph Banks, in saying that barberry bushes caused rust or mildew in corn crops, in a communication of the Rev. Dr. Singer to the Highland Society of Scotland. The distemper on the crops, amounted to more than £1000, or \$4,444; that Sir W. J. Hope, to test the correctness of Sir Joseph's theory, caused the total extirpation of the barberry bushes on his estate; and that since that was done, and for above 20 years, no such distemper has appeared in his fields. And he adds, the same thing has been done in some part of Ayresshire, and the same result has followed.

It is not intended to be understood, that the barberry bush is the cause, but merely a cause, of the mildew. The mildew, or rust, is known to be a parasite; but it is contended, that this parasite belongs to a genus that upon the barberry bush is not the species found upon wheat, oats, &c. The mildew prevails where there are no barberry bushes; but if we admit the malign influence of this bush upon grain, we may with equal propriety admit, that other trees and shrubs which, like the barberry, are the home of rust, as the poplar, willow, and a great many others, have an equally malign influence upon the grain. Two contingencies must occur, it would seem, to favor the propagation of mildew—plants affording its seeds, and a suitable state of the atmosphere to waft these seeds to the standing grain.—*Cull.*

WORMS IN SEED CORN

With the following communication we received a sample of the corn and the worms therein named; the whole were forwarded to a distinguished entomologist who has politely favored us with the answer annexed. Man has thousands of enemies that feast upon the fruits of his labor, and he should carefully learn their peculiar habits in order to avoid their depredations.—*Yankee Farmer.*

MR. EDITOR:—The time for gathering seed corn is not the same with all farmers. Some gather (select) from their standing corn; some select as they husk, and others pick it from the corn crib when they are ready to use it. The second method is the one I adopt and make choice of twin ears as they are generally called. But the time of gathering is not the subject of remark; I have mentioned that merely to show that the time of gathering cannot have produced the evil which has befallen my seed corn.

Some time in the fore part of December I had occasion to pass by my seed corn which was hung up in bunches of from 20 to 30 ears each, in a tight, dry room; and I noticed the excrements of worms adhering to the kernels on the cob, but did not think my corn was inhabited. Some time after this I found the excrements increased, and on examination I found in one kernel the worm which I herewith forward in a phial of camphorated spirit. In the cob under the kernel was a hole made probably by the worm, but whether it was bred in the cob, in the corn, or elsewhere, is more than I can tell.

For your inspection I forward the tip part of an ear that you may see what havoc the creatures are making or have made. The time of their sojourning in the corn may have passed, and they entered on another existence, if so, they cannot be

traced; but if you are able to find one or more of the "corn fed creatures," and can stall it, you may be able to ascertain whence it goes, if you cannot whither it comes.

Shrewsbury, Jan. 21, 1839. T. W. W.

MORUS MULTICAULIS.

The subscriber offers for sale 16,000 Mulberry Trees and 200,000 cuttings, warranted to be the genuine *Morus Multicaulis*. The trees are remarkably healthy and will be delivered at such time as will suit the convenience of purchasers. Orders (for not less than 100 trees) from the country will be promptly attended to.

M. POTTER,
fe26 46 South Charles street.

SILK AGENCY,

Corner of E. and 7th streets, Washington City, D. C.
The subscriber having commenced an Agency for the purchase and sale of SILK MULBERRY TREES, and all articles connected with the growing of Silk, offers for sale the following varieties of Mulberry Trees at Baltimore prices, viz. *Multicaulis*, *Alpine*, *Broussa*, *White Italian* and *Canton*; also *Mammoth White Silk Worm's Eggs*, warranted to be of superior quality. All the recent publications on silk growing for sale, and subscriptions received for the various periodicals devoted to that subject.
no 20 J. F. CALLAN

FOR SALE,

A valuable FARM of prime soil, on the Western Run in Baltimore county, about two miles north west of the 14th mile stone of the Baltimore and York turnpike road, and at the same distance from the depot of the Baltimore and Susquehanna rail road, at Cockey's tavern, in a rich, highly cultivated and healthy tract of country.

This farm contains from 260 to 270 acres, having a full proportion in wood, much of which is building timber, peculiarly valuable in that neighborhood; is in the best state of cultivation; a considerable part in productive timothy meadow, and the residue of the arable land, not in grain, is well set in clover, the whole under good fencing, laid off into convenient fields, each of which is well watered. The farm has a large quarry of excellent building stone. There are on the premises an apple orchard of select fruit trees, which seldom fail to bear abundantly; a valuable mill seat on the Western Run, with a race already dug. There is no location in the country more favorable for a grist mill, having the advantage of a rich and thickly settled neighborhood, and a good public road leading thence to the turnpike road. Buildings substantial and convenient, being a STONE DWELLING, and kitchen of two stories; a large stone SWITZER barn, with cedar roof and extensive stabling below; large hay house and stable for cattle; stone milk house near the dwelling, with a spring of fine never failing water, with other out-houses. On the country road near the mill-seat a good house and shop for a mechanic, under rent to a good tenant. It is well known the lands on the Western Run are in every respect equal, if not superior to any in the county. Adjoining or near are the lands of Col N. Bosley, Daniel Bosley, Thos. Matthews and others. The water power, with about 20 acres of land, is so situated that they may be detached and sold separately, without injury to the rest of the farm for agricultural purposes. Terms of sale will be liberal. Apply to

NATHANIEL CHILDS,
on the premises, or to
WILLIAM J. WARD,

MOLAND'S IMPROVED SILK SPINNER.

The attention of Silk Manufacturers is invited to the recent invention of an improved Silk Spinner, by Mr. Harrison Holland of this town, for which he has obtained letters patent. It is thought to possess many advantages over any machine now in use for the same purpose. By its peculiar construction, it can be moved by hand, steam or water power,—and doubles, twists and spins the silk at one operation. For family use, or persons wishing to manufacture silk in a small way, it is undoubtedly the best invention in use, while it is equally well adapted for factories on the most extensive scale.

A machine in full operation may be seen, or for a more particular description of it, reference may be had to a Circular published by the subscribers, which can be obtained by any one upon application either to

HARRISON HOLLAND, or
STODDARD & LATHROP

Northampton, Mass. Feb. 27.

mh 5 6

POTATOES.

1,500 bushels POTATOES, from Portland, Minnain good order for sale in parcels to suit purchasers by
WILLIAM CHILD,

mh 12 3½ No. 88 South Street, Bowly's wharf.

SPLENDID BLOODED STOCK FOR SALE.

The proprietor of Covington farm will dispose of the following fine bulls on reasonable terms, viz.

One bull two and a half years old.

One do. six months old.

of the improved *Durham short horn breed*; the dam of the first was got by the celebrated bull *Bolivar*; for size, form and beauty they are not surpassed by any animal in the state.

Three *Devon Bulls*, one of which is seven years old next spring, and the largest *Devon* in the State. The *Devons* are from the stock of the late Wm. Patterson, and of undoubted purity.

Two half *Devon* bulls.

Two bulls half improved *Durham short horn*, and half *Devon*.

One splendid bull, a cross of the *Bakewell*, *Alderney* and *Devon*.

One bull, half *Alderney* and half *Holstein*.

These fine animals may be seen at Covington farm, near Petersville, Frederick county, Md. on application to James L. Hawkins, Baltimore, or to
se 11 f FREDERICK FERT. Manger.

CHINESE MULBERRY TREES.

American Silk Agency, No. 95, Walnut st. Philadelphia

The subscriber having opened a permanent Agency for the purchase and sale of all articles connected with the culture and manufacture of Silk in the United States, offers for sale all the different varieties of MULBERRY TREES, suitable for raising the SILK WORM; viz: *Morus Multicaulis Alpinese*, *Brussa Multicaulis Seedlings*, *Morus Expansa*, *Multicaulis Cuttings*, *Improved Italian Trees*, &c. Also, Cuttings from *Norton's Virginia Seedlings*, and *Cunningham's Prince Edward Grape Vines*. These vines produce an abundant crop of fruit, warranted not to rot or mildew and are fine for the table, and capable of yielding the finest wines.

S. C. CLEVELAND, Agent.

AGRICULTURAL IMPLEMENTS.

John T. Darding & Co. encouraged by the favors shown them in the past year, are determined to offer no article to their friends but such as they can warrant, made of the very best materials, finished in a superior manner, of the newest patterns, and at liberal prices.

From John T. D.'s long experience in the manufacture of these articles he flatters himself that he can give entire satisfaction to those farmers, Commission Merchants, Captains and others who may favor him with their orders.

J. T. D. & Co. wish especially to recommend a lately improved and superior "Wheat Fan" as being admirably adapted to clean effectually and fast—price \$25. They invite the attention of the public to their stock of Castings for ploughs or machinery, by the lb. or ton at the lowest prices. Also on sale, New York ploughs, No. 10 1-4 at \$3, No. 11 1-4 at 3 25, No. 12 1 4 at \$3 75. Repairs in general done with neatness and despatch.—any new machine coming into market may be obtained to order.

All orders for field and garden seeds, of the best kinds and fresh, will also be furnished at our Agricultural Establishment, upon the usual terms, by Thomas Denny, seedsman, Grant St. Baltimore, rear of Messrs. Dinsmore & Kyle.
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CHILDS' PATENT SHAVING OR SHARPENING POWDERS.

As tranquility of mind is essential to the convalescence of the body, so will these powders prove from the usefulness and relief they afford to those who have to shave daily, and particularly dyspeptic invalids, whose enfeebled nerves are rendered more feeble by the least agitation.—Their use I strongly urge, and warrant their effect in producing feelings as agreeable and as soothing as an anodyne; and to those in health, instead of an irksome undertaking, the operation becomes a pleasurable pastime. I deem it my duty to recommend to the public this invaluable article, which may be had at the store of the inventor, No. 88 South Street, Bowly's Wharf:—James Gould, No. 136, Market Street:—or at Canfield & Brother's, South-East corner of Baltimore and Charles sts.
Feb 19 X

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BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every Monday

	PER	FROM	TO
BEANS, white field,	bushel.	2 50	
CATTLE, on the hoof,	100lbs	11 00	12 00
CORN, yellow	bushel	85	86
White,	"	83	
COTTON, Virginia,	pound	15	15 1/2
North Carolina,	"	13 1/2	14 1/2
Upland,	"	14 1/2	15
Louisiana—Alabama	"	15	16
FEATHERS,	pound.	53	
FLAXSEED,	bushel.	1 56	1 62
FLOUR & MEAL—Best wh. wh't fam.	barrel.		
Do. do. baker's,	"		
SuperHow. st. from stores	"	7 50	8 00
" wagon price,	"	7 37	
City Mills, super,	"		7 50
" extra	"		
Susquehanna,	"		
Rye,	"		
Kiln-dried Meal, in hhd.	hhd.	18 50	
do. in bbls.	bbl.	4 25	
GRASS SEEDS, wholes. red Clover,	bushel.	13 00	14 00
Kentucky blue	"		
Timothy (herds of the north)	"	2 75	3 00
Orchard,	"	2 00	2 50
Tall meadow Oat,	"		3 00
Herds, or red top,	"		1 00
HAY, in bulk,	ton.	12 00	16 00
HEMP, country, dew rotted,	pound.	6	7
" water rotted,	"	7	
Hogs, on the hoof,	100lb.	9 00	9 37
Slaughtered,	"	9 00	9 50
Hops—first sort,	pound.	20	
second,	"	18	
refuse,	"		
LIME,	bushel.	32	33
MUSTARD SEED, Domestic, —; blk.	"	3 50	4 00
OATS,	"	43	45
PEAS, red eye,	bushel.		2 50
Black eye,	"		2 50
Lady,	"		2 50
PLASTER PARIS, in the stone, cargo,	ton.	4 25	
Ground,	barrel.	1 50	
PALMA CHRISTA BEAN,	bushel.		
RAGS,	pound.	3	4
RYE,	bushel.	95	1 00
Susquehanna,	"		none
TOBACCO, crop, common,	100lbs	5 00	5 50
" brown and red,	"	6 00	6 50
" fine red,	"	9 00	12 00
" wrappery, suitable	"		
for segars,	"	10 00	20 00
" yellow and red,	"	10 00	14 00
" good yellow,	"	10 00	15 00
" fine yellow,	"	12 00	15 00
Seconds, as in quality,	"	6 00	10 00
" ground leaf,	"	7 00	13 00
Virginia,	"	6 00	10 00
Rappahannock,	"		
Kentucky,	"	6 00	8 00
WHEAT, white,	bushel.		
Red, best	"	1 70	
Maryland	"		
WHISKEY, 1st pf. in bbls.	gallon.	44	45
" in hhd.	"	41	
" wagon price,	"		41
WAGON FREIGHTS, to Pittsburg,	100lbs	3 00	
To Wheeling,	"	3 00	
Wool, Prime & Saxon Fleeces,	pound.	50 to 55	
Full Merino,	"	45	50
Three fourths Merino,	"	40	45
One half do.	"	35	40
Common & one fourth Meri.	"	35	40
Pulled,	"	30	33
POTATOES, 60 to 70 cts. a bushel.			

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,	barrel.		
BACON, ham new, Balt. cured,	pound.	13	15
Shoulders,	"	11 1/2	12
Middlings,	"	12 1/2	
Assorted, country,	"	10 1/2	
BUTTER, printed, in lbs. & half lbs.	"	31 1/2	50
Roll,	"	25	31 1/2
CIDER,	barrel.	1 75	2 00
CALVES, three to six weeks old,	each.	5 00	6 00
Cows, new milch,	"	30 00	40 00
Dry,	"		
CORN MEAL, for family use,	100lbs.	2 00	2 12
CHOP RYE,	"		1 60
EGGS,	dozen.	25	
FISH, Shad, No. 1, Susquehanna,	barrel.	6 00	6 25
No. 2,	"		
Herrings, salted, No. 1,	"	6 00	6 25
Mackerel, No. 1, ————No. 2	"	11 75	13 50
No. 3,	"	7 50	
Cod, salted,	cwt.	3 25	3 37 1/2
LARD,	pound.	12	13 1/2

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

U. S. Bank,	par	
Branch at Baltimore,	do	
Other Branches,	do	
MARYLAND.		
Banks in Baltimore,	par	
Hagerstown,	o	
Frederick,	do	
Westminster,	do	
Farmers' Bank of Mary'd, do	do	
Do. payable at Easton,	do	
Salisbury, 1 per ct. dis.	do	
Cumberland,	par	
Millington,	do	
DISTRICT.		
Washington,	Banks, 1p.c.	
Georgetown,	do	
Alexandria,	do	
PENNSYLVANIA.		
Philadelphia,	par	
Chambersburg,	1/2	
Gettysburg,	do	
Pittsburg,	2 1/2	
York,	1/2	
Other Pennsylvania Bks.	2	
Delaware [under \$5]	4	
Do. [over \$5]	1 1/2	
Michigan Banks,	10	
Canadian do.	10	
VIRGINIA.		
Farmers Bank of Virgi.	par	
Bank of Virginia,	do	
Branch at Fredericksburg, do	do	
Petersburg,	do	
Norfolk,	do	
Winchester,	do	
Lynchburg,	do	
Danville,	do	
Bank of Valley, Winch.	par	
Branch at Romney,	par	
Do. Charlestown,	par	
Do. Leesburg,	par	
Wheeling Banks,	2 1/2	
Ohio Banks, generally	3	
New Jersey Banks gen.	3	
New York City,	par	
New York State,	do a 1/2	
Massachusetts,	1 1/2 a 2	
Connecticut,	1 1/2 a 2	
New Hampshire,	1 1/2 a 2	
Maine,	1 1/2 a 2	
Rhode Island,	1 1/2 a 2	
North Carolina,	3 a 2 1/2	
South Carolina,	4 a 5	
Georgia,	5 a 5 1/2	
New Orleans,	7 a 8	

FRESH SUPPLY OF FIELD AND GARDEN SEEDS,

BY THOMAS DENNY, Ellicott near Pratt street, Baltimore, who has just received general supply of GARDEN SEEDS, the growth of 1838, part of which was raised by the first Seedsmen of this country, and a part imported, all of which will be sold wholesale and retail, upon the best terms, such as

GARDEN PEAS; Early and Late assorted Cabbage; Cauliflowers; Radish; Lettuce; Cucumber; Parsnip; Carrot; Onion; Rutabaga Turnip; Parsnip seed of all kinds; Garden Beets assorted; French Sugar Beet; Mangel Wurtzell, &c. &c. Also Field SEEDS, such as Early Sugar, Early White, Sioux, Chin or Tree Corn; Dutton, Baden and Twin Corn; Red Clover; Luzerne and White Dutch Clover; Timothy; Orchard; Herds; Millet, Tall Meadow Oats; superior Seed Oats; Spring Wheat; Spring Rye; Spring Barley; Seed Buckwheat; blue and Kentucky Lawn Grass, &c. &c.

Also GARDEN TOOLS, assorted sizes, and late improved patterns; Bird Seed of all kinds, Double Dahlias; Hyacinths, and Polyanthus, assorted, and selected for beauty and richness of colours, together with Choice Flower Seed, assorted; Mulberry Trees; Fruit and Ornamental Trees; Silk worm Eggs; &c.; Agricultural Books; Silk Manuals; &c. Rohan Potatoes—Early Seedling do. &c. All orders by mail or otherwise will meet with early attention and dispatch, on the best terms for cash.

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AGRICULTURAL IMPLEMENTS.

THE Subscriber acknowledges with gratitude the liberal patronage he has received from the public since the establishment of his Repository in 1825.—During this long period he has studied successfully his own interest by identifying them with the interest of his customers in being prompt and faithful in the execution of their orders.

His present facilities of manufacturing agricultural implements, are not surpassed by any other establishment in this country, he can therefore afford them on as reasonable terms as any other person for the same quality of work. His present stock of implements are extensive both in quality and variety, to which he would invite the attention of those who wish to purchase.

A liberal discount will be made to all cash purchasers, and to those who purchase to sell again.

The following names are some of his leading articles viz His PATENT CYLINDRICAL STRAW CUTTERS, weed and iron frames, but all with his patent double eccentric feeders, with or without extra Knives, prices varying from \$33 to \$110, subject to cash discount, he challenges the world to produce a better machine for cutting long forage, Myer's WHEAT FAN and ELIOTT'S PATENT HORIZONTAL WHEAT FANS, both a very superior article. Fox & Borland's PATENT THRESHING MACHINES and Martineau's PATENT HORSE POWERS, also superior articles—A great variety of PLOUGHS, wrought and cast Shares, of all sizes and prices; Gideon Davis's improved PLOUGHS, of Davis's own make of Patterns, which are sufficiently known to the public not to require commendation; 100 CORN CULTIVATORS, also expanding CULTIVATORS, both iron and wood frames, and new plan; TOBACCO CULTIVATORS.

F. H. Smith's PATENT LIME SPREADERS, the utility of which has been made known to the public; together with a general assortment of FARMING IMPLEMENTS; PLOUGH CASTINGS of every description and superior quality kept constantly on hand at retail or by the ton; also, MACHINE and other CASTINGS furnished at short notice and on reasonable terms, his iron Foundry being furnished with the best materials and experienced workmen with ample machinery running by steam power for turning and fitting up machinery.

ALSO—Constantly on hand D. Landreth's superior GARDEN SEEDS;—In store POTATOES and common SEED OATS, TIMOTHY and HERDS SEEDS all of superior quality.—All orders will be promptly attended to.

JONATHAN S. EASTMAN,

Farmers' Repository, Pratt street,
Near the Baltimore & Ohio Rail Road Depot.

A SETTER FOR SALE.

The subscriber has for sale a thorough bred Setter, eleven months old. He has been but little hunted but gives indication of making a first rate dog. He comes of a strain remarkable for their fine performance in the field, and is a beautiful rich brown white in the breast and face. His price is \$30. All applications by letter must be post paid. to 26 EDWARD. P. ROBERTS.

SEEDS, PLANTS, FLOWERS.



The subscriber offers for sale at his establishment a fresh supply of GARDEN SEEDS of the very best quality; those that cannot be grown in this country he imports direct from Europe from a source that can be relied on.

Besides a large collection of GREENHOUSE, hardy ORNAMENTAL TREES and Shrubs, Herbaceous Plants, and Bulbous Roots, and a choice collection of the very finest double Dahlias offered for sale, all on reasonable terms, wholesale or retail.

Also on hand a few bushels of ITALIAN RYE GRASS, with 100 bush. ITALIAN SPRING WHEAT, of the true kind. All orders for Fruit and Ornamental Trees, or any thing appertaining to his establishment will be strictly attended to, by

JOHN FEAST,
Florist & Seedsman, cor. of Lexington and Pine sts.
ja 22 tf Baltimore.

Printing, executed at the Farmer & Gardener office, at short notice.

THE AMERICAN FARMER.

The proprietors of this paper have a few complete sets of this work on hand, which they will dispose of at the reduced price of \$50 a set.
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THE FARMER & GARDENER

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, E. P. ROBERTS AND SAMUEL SANDS—EDITED BY E. P. ROBERTS.

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BALTIMORE, MD. APRIL 2, 1839.

Vol. V.

THIS publication is the successor of the late **AMERICAN FARMER** and is published at the office, at the N. W. corner of Baltimore and North streets, over the Patriot office, at two DOLLARS AND FIFTY CENTS per annum, if paid within one month from the time of subscribing, or \$3 if after that time. All letters to be postpaid.

BALTIMORE: TUESDAY, APRIL 2, 1839.

FOURTH EDITION OF ROBERTS' SILK MANUAL.

The third edition of this work, which was a large one, and published in December last, having been disposed of, leaving a large order unsupplied, the proprietors have put the fourth edition to press, which will be ready for delivery in a short time. In announcing this fact to the public, they are the more gratified, because in the ability to do so, they behold the sure evidence that the Silk culture is going ahead.

The communication of an old and esteemed correspondent from Hempstead Court House, Arkansas, will be found, like every thing from his pen, of profound interest. Sincerely regretting both his indisposition and misfortunes, and wishing him a speedy restoration to health and improvement in his temporal affairs, we welcome him again to our columns.

MR. VIELE'S ADDRESS.

We received some days since a copy of the address delivered by Mr. Viele, before the New York State Agricultural Society, at its recent annual meeting at Albany, and have read it with equal pleasure and profit. Mr. V. takes a comprehensive view of the interests of agriculture, and shows conclusively, not only what have been the causes which have conspired to retard its advancement, but those measures which are necessary to give tone to its improvement. The address in point of style is as creditable to its author's head, as its sentiments are honorable to the feelings of his heart. We commend its principles and reasoning to the consideration of those legislators, who meanly wait to see what effect a measure may have upon their own election, before they can be brought to contemplate its influence upon the welfare and happiness of the community—we commend it to such, because they will there find

a rebuke of the sordid spirit by which they have been hitherto animated.

A writer in the "Yankee Farmer" gives one or two excellent hints in regard to the condition in which the leaves of the Mulberry should be given to silk worms, and the best mode of preserving them. He assigns abundant reasons why leaves should be used in a wetted state, and cites an experiment, accidentally made, in which it was shewn that they may be made to retain their freshness for weeks by the process of salting. This latter suggestion is particularly valuable in northern climates, where the foliage may be destroyed by early frost before the worms have done feeding, and where of consequence the certainty of provision for them is a matter of much moment. It is well known that hay is improved by being salted, and saved harmless from the effects of heating or moulding, when in large masses, and a similar process might be of great utility in the treatment of other vegetable growths. The preservative quality of salt is universally known and practised upon in regard to animal food, which is made, through its agency, to retain its soundness without losing any of its good qualities. Maryland is often visited by early frosts, in the northern sections of it at least; we therefore mention the matter that silk growers in our State may avail themselves of the hint, and guard against their ill consequences.—*Balt. American.*

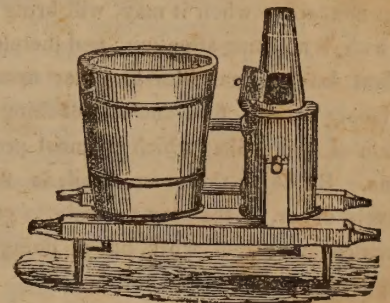
We have not seen the article in the *Yankee Farmer*, alluded to in the above paragraph, but as the hints named are calculated to do much injury to the silk culture, we deem it proper to say that the practice of either *wetting* or *salting* mulberry leaves to feed to worms is pernicious. In Europe, experience has taught those engaged in the business, that leaves should not be fed to the worms with even the moisture arising from dew on them, and common sense will tell us how much more injurious they would prove when given wet. As to *salting* leaves, such a practice should never be followed unless the object to be attained be the *killing* of the worms. However necessary and healthful to the animal economy of man and beast salt may be, there is no fact better established than this—*salt is destructive to the life of the whole insect tribe.* Nor do we know a more efficient agent in their destruction. If our turnip patch and clover pasture were infested with grasshoppers, or any other species of insectiferous depredators, we should strew salt over them with the confident assurance that we should thus get rid of them. If our corn field

was beset by the grub, or cut worm, with a sprinkling of salt on each hill, we would kill them as certainly as with a bodkin.

The salting of hay for stock is quite another affair; thereby great good may be effected; but he who may attempt to feed silk worms on salted mulberry leaves, will never raise silk enough to make stockings for his lady-love.—*Edt. Farmer & Gardener.*

BARNUM'S PATENT BOILER.

In passing down Baltimore-street a few days since, we were very forcibly struck with a very simply constructed boiling apparatus, and as we have long wished to see some cheap contrivance for steaming roots for stock, we stooped and examined it with an eye to that object. We annex a cut of it, and have no doubt our agricultural readers will agree with us, that it will answer the purpose. The only difficulty we see in the premises can easily be obviated. We allude to the application of a strainer over the mouth of the tube, or pipe, to prevent the roots from stopping it up, and thus cutting off the inlet to heated air.



As the reader will observe, this boiler is fixed upon a light frame work, is perfectly portable, and may be removed from one place to another with great facility, so as to bring the steaming operation immediately in the vicinity of the animals to be fed. The machine we saw had a tub attached to it of the capacity of 30 gallons; its price \$12; but by increasing the size of the boiler, a steaming tub of corresponding dimensions may be affixed; and judging from the one to which we allude, a boiler and tub of capacity amply sufficient to prepare the food of twenty cows, might be built for about \$25. The owner of the patent right to this boiler for the city and county of Baltimore, is Mr. James Cortlan, No. 10, Baltimore-street.

THE SILK INTEREST—LEGISLATURE OF MARYLAND.

We have heard with feelings of profound regret, that the House of Delegates of this State, have rejected the bill reported by the Committee on Manufactures for the encouragement of the silk culture. As we have not seen any report of the debates upon the occasion, we cannot tell the ground upon which it was defeated; but this we will say without the fear of contradiction, that those who have opposed it, have either wilfully or ignorantly sacrificed the interests of the State; that any man who has not sagacity enough to discover the propriety of the policy of the bill, is not qualified for the representative trust; and that any who may have opposed it from selfish party considerations, have proved themselves insensible to the nobler impulses of enlightened patriotism.

WORK FOR APRIL.

ON THE FARM.

This month, which seems to have been consecrated by Providence, if we are to judge from the offerings of the earth, to the beginning of the toils of spring, must be improved by all who expect to derive their support from agricultural pursuits. For in farming and planting, as in every thing else, delays are not only dangerous, but absolutely destructive. Nothing which can be performed on the farm one day should be delayed to the next; for that next come when it may, will bring something with it meriting attention; and therefore the provident husbandman should enter upon each day's labors with a firm and unblenching determination of doing that which is most proper to be done. By doing things in detail, as they respectively occur, is the way not only to get over the greatest amount of work, but of doing every description of it in the best time.

With these preliminary remarks, let us see what should first arrest our attention.

Corn.—As the time has arrived in many parts of our country for planting, and is fast approaching in many others, let all seriously set themselves to work in order that they may get in this first in importance of all the grain crops, in due season. It is time that the *manure* was in place, whether you plant this month or the next, and as we advised you last month, so let us do now—if you have not completed hauling it out, go to work without a day's delay, and put it in a position for convenient use when it may be required. Your manure once in, or near the field, much of the labor consequent upon putting in your corn will have been overcome.

One more word of *advice* with respect to your corn. Unless your ground be *strong*, put *none in without manuring*, either *broadcast*, or in the hill. This brings us to the subject of the

Preparation of the ground.—If you have *plenty* of manure and force to put it in place, *broadcast* manuring is assuredly best; but if you are scant in either one or the other, manuring *in the hill* will necessarily present itself to you as the most economical and prudent way of enriching your ground for your corn crop. If the ground on which you contemplate to grow your corn was in clover last year, and ploughed last fall, let your harrows and drags be liberally employed in pulverizing, so as to make the earth as fine as it is susceptible of being made. But in effectuating this desirable object, as well as in laying off your furrows, and listing for planting, be sure to take especial pains not to disturb the sod, as that if left to repose in its rightful position, will prove a mine of great value to you, from which in a few weeks your corn will derive a large portion of its most healthful nourishment, for each acre of clover-ley or grass-sward ploughed under, will afford from 12 to 14 tons of, excellent vegetable manure, the which when added to that which you may apply, will make your corn crack again in its growth, and ensure you a good crop.

If your corn ground has not been *limed*, let me impress it upon you that your interest will be greatly promoted by *strewing* only a few bushels to the acre, if it only be *five*. But if you cannot conveniently do this, make a mixture of ashes and plaster, in the proportion of 5 bushels of the former and 1 of the latter, and sprinkle a small portion on each hill as the corn comes up. Bear in mind that no matter what other manure you may use, your corn will be benefitted by a small portion of lime, plaster, or ashes. As to distances it is useless to speak, as in matters of this nature, corn-planters will exercise their own notions and views; but it may not be amiss to observe, that nearly all the *large products* were obtained from grounds closely planted.

Culture.—The *plough* should, after the corn assumes a tolerable height, be supplanted by the *harrow*, or cultivator, as it is impossible to plough after the roots become developed and spread, without cutting them, causing them to bleed, and, consequently, doing mischief to the crop. All that is necessary to ensure a good yield, after the corn is well up, is to keep the weeds and grass under, and the soil open and well stirred, and these objects can be attained by the judicious use of the implements we have named, together with the hoe.

Oats.—The sooner you get in this crop the greater will be the yield, as it is a grain that delights in early planting. And if you wish a good crop, prepare your ground well, for the slovenly manner in which it is often put in, tends to lessen its productiveness. If your ground be *poor*, apply a bushel of plaster to the acre, and thus make the best amends you can for confiding this useful grain to the care of an exhausted soil. Sow 2 bushels to the acre.

Barley.—As soon as the ground is susceptible of being put in good order is the time to get in your barley. If your ground be not good, and you have not the means of manuring, you had better omit sowing. But if your ground be good, or you can manure it well, then plough and pulverize thoroughly, and if the season be propitious, you may expect from 30 to 50 bushels to the acre. The quantity of seed per acre is from 2 to 2½ bushels. Prior to sowing, it should be soaked, drained and rolled in plaster, or ashes.

Grass Seeds.—It will be well to sow what grass seeds you may design to put in, as early this month as possible, whether it be on your grain fields, or with your oats. For quantities see our last month's work.

Spring Wheat.—If you intend sowing any of this variety of wheat, get it in as early as possible; but for our single self, unless we should undergo a complete revolution in opinion, we shall never sow another grain of it, while it shall be permitted to us to remain in this mundane sphere; for verily 12 bushels from 4 acres is "a most beggarly account of empty boxes." Quantity of seed per acre, 2 bushels.

Spring Rye.—We have no experience in this grain, but the earlier it is got in the better. Quantity of seed per acre 1½ bushels.

Hemp.—Put in your seed early.

Potatoes.—Put in a few bushels for early use, and whether you plant in hills or drills, do not spare manure; for verily potatoes are as heavy feeders as the Knight of Eastcheap. Plough deep, pulverize your ground as fine as a fiddle, and keep it *clean* afterwards, and you will not fail to have a good crop, provided you take our hint and manure well. Did you ever see a hog grow well, and put on the port of an Alderman on thin potatoes? If you have not, so will you never get a heavy crop of potatoes unless you attend to their diet.

Early Turnips.—Take our advice and sow a little strip of ground in early turnips. The 16th of an acre will give you as many as will serve your table from June till August; and why should

you let your family be without this acceptable vegetable, when you can procure it with so little trouble, and at such little cost?

ROOTS FOR STOCK.

If you desire to keep your cows well to the pail next winter, take this our advice; for every ten, put in an acre of *Mangel Wurtzel*, or *Sugar Beet*. This quantity of land in either, will keep them, with the usual allowance of hay, in excellent condition, and enable you to make three pounds of butter to every one that you can make without roots of some kind.

Preparation of the ground.—If your ground was in corn, potatoes, turnips, or any other cleansing crop last fall, and you did not fall or winter plough it, do so now immediately—in a few weeks, say *three*, put on 20 loads of good fat manure to the acre, spread it evenly, and as spread, give your ground another ploughing, as deep as you can well go with your team: then harrow twice or thrice, and roll. This done, lay off your furrows, north and south, 2 feet apart, when you must drill in, or handsow your seed, which should be dropt about *six* inches apart in the rows, 2 inches deep, and covered with a rake, taking care to draw the back of the rake over the drills when covered, so as to press down the earth. When your beets come up and get of a tolerable size, thin them out so as to stand 12 inches asunder. Keep them clean and the ground well stirred, and you will be sure to make a good crop.

Prior to planting your seed, soak them in warm water in which saltpetre has been dissolved: drain and roll in plaster. When the plants have leaves the size of half a dollar, strew a bushel of plaster to the acre over them while the dew is on.

Tools and Implements.—Look up every thing under this head on your place, and have them put in the best possible order: by so doing you will save yourself much trouble and disappointment.

Fences.—Attend to your fences and put them all in order.

Cows.—Give your cows that are to calve this month, generous slops.

Sheep.—Be kind to your sheep during this month, and particularly to your ewes.

Horses.—See that every one of these useful animals on your farm are carefully attended, curried, fed and salted.

Morus Multicaulis.—With this we shall close our monthly work on the farm, and would advise you, if you have not done so, to put in a few thousand cuttings. For directions see our last week's paper—also our *Manual*, the which, if you have not, you should purchase.

Having attended to the interests of the farm, let us go into the garden, and see what we can do therein to increase the luxuries of the table, and gratify the generous pride of those noble wives and mothers, whose chief objects are to please their husbands and secure the comfort of their families.

IN THE KITCHEN GARDEN.

Cabbages.—If you have been so prudent as to provide yourself with a hot-bed, and have cabbage plants growing therein, be particular to open your glasses daily so as to inure them to the open air, —and about the middle of this month you may transplant them into the open ground. Prior to their removal, however, let the ground be well prepared by thorough manuring, digging and pulverization.

If, however, you have a not a hot-bed, or plants, select a warm border in your garden, put on about three inches of good manure, dig it in well and pulverize as fine as a rake and willing heart can make it, then sow a small quantity of Early York, Bullock's Heart, or Early Battersea cabbage seed: these will be fit to plant out in a few weeks, and afford you a supply of tolerably early cabbages for table use. The trouble will be trifling, and you should not omit making the effort to secure a supply.

Peas.—Sow peas to come in when the more earlier sown has become too hard. By sowing a few rows once a fortnight for a few weeks you may secure yourself a continuous supply. As your peas advance in size, earth them up; keep them clean, and be sure to stick them before they get too high.

Cauliflowers.—Cauliflower seed may be sown in open bed this month.

Beans.—Plant your crop of beans for early table use, and be sure to work them as they require it.

Lettuce.—Sow small beds of this vegetable throughout this month at intervals so as to secure continuous supplies of tender heads.

Radishes, small sallading and spinach should all be sown early in this month.

Carrots, parsnips, beets, onions, turnips, may all be sown, but the earlier they are in the better.

[For the Farmer Gardener.]

HEMPSTEAD, C. H. ARK. March 1, 1839.

E. P. ROBERTS, Esq.

Dear Sir:—The silk interest, which absorbs so much public attention in the older and more enlightened portions of the Union, has not yet elicited much attention among us. The Chinese Mulberry, so far as I can learn, is not yet to be found in this State, except in my little nursery. There it thrives admirably. The young buds, in

sheltered situations, are at this time expanding, sufficiently to feed young worms; and last fall, though we had an early frost, fresh leaves were to be found as late as the 10th of November—thus giving more than eight months vegetation for the precious insect. The three original trees that I have, of three seasons growth, are twelve feet high, and eight inches in circumference at the root, those of two years are nearly equal, and the sprouts of last year's growth, from two year old roots, are from six to ten feet high, and from six to twelve sprouts from each root. I find, also, from trial, that a highly calcareous soil, like our prairie, is best adapted to the culture of this tree. Observing that the native *Morus Rubra* delighted in the skirts of the prairie, where the soil contains 50 per cent. of carbonate of lime, I planted last spring a few of the *Morus Multicaulis* in this kind of soil: they far surpassed in every respect those planted in the adjacent sandy loam, though well manured. The wood is more firm, shorter jointed, more branches, and the leaves thicker and darker colored; resembling in this respect, the difference between the cotton plant growing in the sandy land and that in the prairie—the former growing taller, but the latter a thicker stalk, and producing a greater number of limbs and bolls. With my present planting, which I have finished, I shall have this year something like 20,000 of these precious trees growing. Having the fullest confidence in the final success of the enterprize, I am encouraged to go on, though alone, in preparing for the introduction of the silk culture, nor shall I be detained by scoffs or sneers.

The Grape Vine, also succeeds well with me, though for the three first years, the first was mostly lost by the mildew, yet last year, those vines when I had made the soil artificially calcareous in a high degree, perfected their fruit, without this disaster. Those vines when marl was not used, mildewed, and cast four-fifths of their fruit as usual. This experiment, which I was induced to make from a hint once thrown out by Mr. Hebermont, appears to have fully succeeded. The soil was originally a stiff red clay, and had been an old cow-pen; I gave it a dressing of an inch thick of marl from the prairie, containing 75 per cent. of carbonate of lime (rotten lime stone.) These, however, were European vines, of four different varieties, all alike subject to mildew. The native vines of our own forests which I had transferred to my garden, and cultivated, are sure and abundant bearers, not subject to any disease. I have planted this season a quantity of seeds of the European grape, in the hope that the vines, being actually native, may be better adapted to our climate. Should the experiment succeed, it will be a "commutation devoutly to be wished."

I cannot help considering the introduction of the silk culture as forming a new era in agricultural enterprize, and calculated to be attended by the most important benefits to all classes of our society. Could it be introduced here, in the elevated and healthy portion of our State, with the energy and intelligent enterprize with which it is impelled by New England ingenuity, with the advantages of soil and climate, for many and great means of bringing vast tracts of land into cultivation that are now considered unfit for corn or cotton, from being brot-ten and hilly, and subject to wash. This circum-

stance would be no objection to

the cultivation of the mulberry, but rather an advantage; and besides, such lands are generally watered by the finest springs, which is seldom the case with the extensive alluvial plains that are usually selected for large cotton plantations. Unfortunately our best cotton lands lie bordering on the rivers, that are skirted by extensive swamps, the first reclaiming of which is attended by an enormous sacrifice of human life, and none but the African race can endure the labor of cultivating them. But our elevated lands produce the mulberry equally as well as the river lands, and are extremely healthy. And the silk culture, not being adapted to slave labor, might occupy the hills, while cotton should be confined to the low lands. They need not interfere with each other, but be a mutual support, for each should employ a distinct class of the population, and occupy different locations. The alluvial plains of the rivers will be laid off in large cotton plantations, with but few white families, while the hills will be covered with a dense free population, of small farms, and family manufacturers of silk. The grape, also, that now luxuriates in native wildness, will be subjected to cultivation, and made to vary, beautify and enrich the scene.

Respectfully, yours.

[For the Farmer and Gardener.]

THE PLOUGH AND ITS ATTRIBUTES.

"Wake up my muse! wake up my soul!
Survey the globe from pole to pole;
To what employment shall I bow,
Pursue the arts or hold the plough?"

Of all employments I think that of guiding the Plough would be most preferable; and for various reasons: Health, wealth, and a consciousness of doing good. It was said by Dr. FRANKLIN, that guiding star of American youth, that "he who would be wealthy now, must till the soil and guide the plough," and truly he did say so; for,

"Upon a just and strict attention,
The plough appears a high invention."

All nations and communities of people are subservient to its influence; without it, the necessary means and wherewithal for the sustenance of life would be denied to us. The tiller of the soil, with the aid of his plough, is emphatically the benefactor of his people. Were we, as a nation, to be deprived of its benign influence, woful would be our situation; calamity upon calamity would dwell around us; famine upon famine, in its most direful shape and form, would haunt our doors; and starvation would be our lot.

All nations upon the face of the earth, and all the inhabitants thereof, are dependent upon the effects, which when properly brought into action, of the plough, for their prosperity, and in fact their very existence. A land is given to us blessed with the bounties of a beneficent Providence, which has placed for our use the sun above and around, to shed its rays and cause the vegetation of the earth to flourish and bring forth the means of subsistence; and the rain and dews of heaven to fall for the same purpose. The Heathen and the Christian alike must look to that all-powerful instrument for aid. It was foreseen by the Saviour of the world that it was needed, for it is written, that

"The great Messiah, when he wrought,
Made yokes and ploughs, as we are taught."

In some countries, where "princes, potentates and dukes do reign," to them is given the preference to "draw the first furrow"—for the people, in their blind subservience, do believe that they (their rulers) are best capacitated for the office; as is here shown:

"Mogul, renowned of India's land,
First takes the plough into his hand;
His millions then in honor toil,
To pulverize the fertile soil."

Elisha of old, it is said, drove the ox and held the plough, and rent and tore the rugged earth with twenty-four oxen. Immortal Job launched his plough with a thousand oxen, and rent the clay.

Furthermore, the ploughman is the happiest and most contented being alive. See the plough-boy following in the furrow, on a calm, sultry, summer's day; observe his blithe and jolly countenance; hear the melody of his noon-day song, and the shrill sound of his soul-stirring whistle. Who can look and hear, without being struck with the truth, that

"Of all pursuits by man invented,
The ploughman is the best contented."

True it is, that he is not *always* amply rewarded, in a pecuniary sense, for his labor; yet he is contented—the consciousness of doing good, the will, and the means, are sufficient. He toils not for nothing; he sees all are looking up to him for the bread to satiate their craving hunger. This is true, and goes far to substantiate what has just been asserted.

"Although his profits are not high,
Yet on his labor all rely;
Mechanics all by him are fed,
Of him the merchant seeks his bread.
His hands give food to every thing,
Up from the beggar to the king;
Our clothes from him must all arise,
To deck the poor or dress the wise."

The farmer is the man, properly, to whom we ought to look up to, as the "benefactor and father of his people." Why should he not have the praise which he so justly merits.

"We by vote may justly state,
The ploughman ranks among the great;
More independent than them all,
Who dwell upon this earthly ball!
All hail ye farmers, young and old!
Push on your ploughs with courage bold;
Your wealth arises from your God.
If then the plough supports the nation,
And men of every rank and station,
Let kings to farmers make their bow,
And never speak against the PLOUGH."

PLOUGH-BOY.

YORK, Pa. March 20, 1839.

FALL PLANTING MORUS MULTICAULIS.

"DEAR SIR:

"I laid down about two hundred roots and branches of the *Morus Multicaulis* last November; they have kept finely. I have no doubt but that winter planting is the best, and one inch in the ground renders them safe; mine were covered too deep. I have left many trees out, they are only injured at the ends. Of the hardiness of the plant there can be no question.

In haste, your friend,

March 16, 1839.

ARCH. DORSEY."

[For the Farmer and Gardener.]

BROOM CORN CROP.

The proprietors of the broom factory at Georgetown, D. C. take pleasure in laying before their agricultural friends, an accurate statement of the product of this new grown crop. The estimate is made on the measurement of seven acres of land the last year, although the season was unfavorable for corn. From the seven acres they secured 24,488 lbs. of broom brush, cut with six and seven inches stock, with seed on.

After taking the seed off, the nett brush weighed, 5,549 lbs.

The seed measured from the same, 473½ bush. and weighed 40 lbs. per bush. making 18,939 do.

RECAPITULATION.

Nett weight of the brush from 7 acres, 5,549 lbs.

Nett weight of seed from the 7 acres, 18,939 do.

Making the gross weight grown, 24,488 do.

VALUE OF CROP AS FOLLOWS:

5,549 lbs. of neat brush, at 5 cents per lb. or
\$100 per ton, \$277 45
473½ bushels clear seed, at 50 cents
per bushel, 236 75

\$514 20

Amount of crop grown per acre on seven acres, \$73 45½

It would be well here to state, in the year 1835, with a more favorable season, the same seven acres of land was planted in Indian corn, and produced 57½ bbls. and sold at \$4.50 per bbl. \$261 75

Making the difference in favor of broom corn, on seven acres, \$272 45

The Indian corn crop per acre, was about \$33 10¾. Making the difference in favor of broom corn \$40 35.

For planting, our own experience has taught us to lay the land off three feet each way, so as to avoid hoe labor. This distance will give 4800 hills per acre. On the above described land we would leave from 10 to 15 stalks in the hill. The preference is given to the finest brush. Half a gallon of seed will plant an acre carefully dropped.

Any farther information can be had, by application at the factory. The proprietors of the Georgetown Broom Factory have, with great care, selected their earliest and best seed for planting, and offer it to the farmers at a moderate price. For securing the harvest, will be hereafter noticed.

GEORGE T. MASON & Co.

MARL.

This substance, which in some one of its many forms is so widely disseminated over our country, but which has been so long neglected by the farmer, under a more enlightened course of farming, is, we think, destined to act an important part in fertilizing soils now considered nearly barren in many parts of our country. It is an interesting fact, that marl is found where it is the most wanted; and that over the whole extent of land which stretches from New Jersey to Georgia, and from the sea to the highlands of the interior, it is but a few feet to immense deposits of fertilizing matter, which only requires raising to the surface, to give productive powers to large sections of country which have hitherto been

considered worthless. The invaluable treatise of Mr. Ruffin, on the use of lime and its combinations, has been the means of turning attention to that subject, and examination has unexpectedly disclosed the fact of such deposits existing over almost the whole extent of the territory indicated. Dr. Cooper and Prof. Ellet, of Columbia College, South Carolina, have lately given to the public an analysis of several kinds of marl in that State, and which, from experiments, promises to be of the most essential service. New Jersey has, however, as yet, derived the principal benefit from the use of marl; but in whatever part of the country it exists, it is a treasure of no mean value. Mr. Pierce, in a survey of the alluvial district of New Jersey, furnished for Silliman's Journal, thus describes the use and effects of marl:

"I visited many beds of marl, and found them of a pretty uniform character. The color is generally grey or greyish white, and good in proportion to its whiteness, which indicates the quantity of calcareous earth it contains. From 30 to 80 loads of marl are spread upon an acre. It is believed that a good dressing will last from 12 to 20 years. The lands of Monmouth county alone are said to be enhanced in value more than half a million of dollars by the discovery and use of marl.

"A respectable farmer of Middletown mentioned to me, that a few years since he contemplated abandoning his large farm for land in other districts, as his own was unproductive. Learning the discovery of marl, he made himself acquainted with the mode of examining, and found good beds of this manure in almost every field, and liberally supplied dressings to the soil. In walking over his ground, I observed rich white marl breaking out of banks and hillocks, and the streams paved with marine decaying shells. For more than a century this land had been regarded by the proprietors as worn out and useless.

"This farm, in its improved state, exhibited a gratifying sight. The hills, where formerly thorns, thistles, and mulleins, disputed the dominion, now supported luxuriant corn. Extensive verdant meadows were clothed with a rank second crop of grass, and well filled barns evinced the productiveness of those fields, which are now estimated at three times their former value."

ROBBINS' OATS.

Extract of a letter from D. W. Goodenow, Esq. Delavan:—"Enclosed are a few oats, which are known in the Black River country as Robbins oats, he (Robbins) having been their first grower. Some five or six years since, he observed in a field of the common oat, four heads that had grown out six or eight inches higher than the surrounding ones, and were ripe two weeks earlier. From those four heads has grown the seed. Very few of the common kind of oats are now sown in that country. The average yield of these oats has been about fifty bushels per acre, and in weight they have varied from 42 to 46 lbs. to the bushel, depending upon the old or new ground on which they were sown—the old yielding the heaviest oats. The enclosed are but a fair sample. I have just returned from that country with thirty bushels of them, which I intend to sow this spring."

The oats sent in the above letter, very much resemble the *Potatoe* oat.—*Genesee Farmer*.

ORIGIN OF BOTS IN HORSES, AND THEIR CURE.

FORT HUDSON, LA. Nov. 23, 1838.

MR. PORTER:—I have observed lately much speculation, as to the origin of the bot or grub. I have read this evening Mr. Mitchell's account of his experiment in the cure, and after the animal died his experiment in killing the worm, after taking it from the stomach of the dead horse.

As it should be our object to do all the good to mankind, I feel it my duty to give to the world what I think a certain remedy for the bot or grub, without commenting how they find their way into the horse's stomach, or how they are formed—it is enough that such a thing does exist as bots in horses, and that it is important how to get rid of them when we ascertain our horse is affected by them.

To make the bot or grub let go his hold, give the horse a quart of molasses or dissolved sugar, with a quart of sweet milk—in thirty minutes you will find the horse at ease; then pulverize an eighth of a pound of alum—dissolve in a quart of warm water, and drench your horse—after two hours or less, give the horse one pound of salts, and you will find the bots in the dung. I have never failed. I think this is, after all the speculations and cures I have seen, the only thing that will to a certainty remove the bots.

The molasses and sweet milk cause the bot to let go and prey upon the sweetening—the alum contracts him and the salts passes him off.

Respectfully yours,

JOHN C. WALTER.

GRAIN WORM.

We comply with pleasure, with the request of our friend, the conductor of the 'Cultivator,' in giving an account of the worm which has appeared in Western New York, and which has excited much serious apprehensions. It is very desirable that it should be ascertained whether this new enemy of the wheat crop is the same in the Genesee Valley that it is in that of the Hudson, or whether more than one kind of worm is concerned in these depredations.

The worm, which is called the wheat worm in Western New York, belongs to the genus *Phalæno* of Latreille, *Gsmetrixæ* of Stephens, and embraces about eighty genera. This class of worms is usually called surveyor, carpenter, or measuring worm, from the manner in which their movements are effected. The number of legs varies in the several kinds, but in the wheat worm there are six pair, three to each extremity. Like most other worms of this genus it has the power of spinning a web, as may be seen from the faculty with which they attach themselves when disturbed to straws, sides of the threshing floors, fanning mills, &c. It varies in length from three to five-eighths, and some may possibly a little exceed the latter measure. Between three-eighths and a half an inch, may be considered the average length. The color is very uniform; a yellowish brown, or what among farmers would perhaps be termed butternut color. That it is the larvæ of a fly or moth, cannot be doubted, but of what particular kind does not seem as yet to be conclusively ascertained. This worm has been known among wheat for years in this part

of the state; its increasing numbers has created the present alarm respecting it. From experiments made by us last fall, and recorded in the *Genesee Farmer* for last year, it is clear the worm feeds not only on the kernel in its soft and milky state, (though this is the time when the most serious injury is accomplished) but also in its hardened and ripened state. In none of our experiments have we seen ripened kernels perforated by the worm; it was evidently gnawed, off, and the worm usually commenced on the germinating end of the kernel.

We have seen in wheat in this district, but it was many years since, a worm which perforated the kernels, in the manner of the pea worm, and which lived apparently on the inside of the ripened grain. In this case it seemed to us the egg must have been deposited in the kernel, while in the soft or milky state. However that may be, the worm was clearly a different one from that described above, and which seems to threaten the grain grower at this time. Unless we have forgotten, there is a very good description of this perforated larvæ or maggot, in the November number of the *Cultivator*. It may also be found at page 367 of volume 8 of *Genesee Farmer*. This account agrees very well with our recollection of the worm alluded to; but it has not since 1824, shown itself to any extent in our wheat.

We hope this notice, imperfect as it necessarily is, may aid in determining whether the worm which has shown itself in the Genesee County, is the same that proved so destructive in the Valley of the Hudson.—*Genesee Farmer*.

LEGISLATIVE REPORT.

In the Legislature of New York, on the 4th ult. Mr. C. E. Clarke, from the committee to which were referred the various petitions praying for legislative aid in behalf of agriculture, made the following report:

"That the committee have had the subject under consideration, and have given it the attention which its importance seems to demand.

These petitioners are of four kinds. One class asks aid in behalf of the culture of the mulberry and the growth and manufacture of silk; another, for encouragement of the culture of the sugar beet and the manufacture of sugar; another, in behalf of the American Institute; the fourth, and by far the most numerous class, asks aid and encouragement in behalf of agriculture generally, and their views cannot be more fully and laconically expressed than in the words of the petitioners themselves.

"The memorialists respectfully represent, that agriculture, being the great business of the State, and the source alike of its prosperity, independence and moral health, is peculiarly entitled to the fostering care and patronage of the representatives of the people; that your memorialists consider our general practices in husbandry as defective, and far behind the improvements of the age; tending to exhaust the natural fertility of our soil; and calculated, when our new lands shall be reduced to the condition of most of our old ones, to render us dependant upon foreign countries for bread-stuffs and other necessities of life—a condition humiliating and degrading to an agricultural people, and yet one that we are already partially realizing,—that while the products of our soil have failed to increase with the increase

of our population, the agriculture of some other countries, and of some of our sister states, has been essentially improving, under the wise and salutary provisions of their public councils; and that the like provisions, on our part, to stimulate and reward skill and industry, and to diffuse useful knowledge, in a business that so intimately concerns the welfare of all, is loudly called for, by considerations of the public good, as well as of justice to the great agricultural class of the community.

"A bill was reported at the last session of the Legislature to encourage agriculture, which the hurry of business prevented being definitively acted upon. That bill contemplated an appropriation of public moneys in aid of county agricultural societies, and for the establishment of a Board of Agriculture, to collect and disseminate all that might be found useful in the productions and in the management of our husbandry. It also contained provisions to encourage the culture of silk in our State, to arrest the depredations of the grain worm, and for a general diffusion of useful agricultural information.

"Your memorialists think favorably of the general features of that bill, and consider its provisions eminently calculated to improve our system of husbandry; and to multiply the sources of our wealth and prosperity, by enlightening, stimulating and rewarding useful labor. Your memorialists, would therefore respectfully pray, that the general principles of the said bill, or one of like import, may receive your early attention, and that they may be matured into a law of the State."

Of these various petitions there are now in the hands of the committee rising of eighty, and the signatures amount to nearly six thousand. It is also understood that in the hands of the Senatorial committee on agriculture there are many more. There are few counties in the State from which petitions have not come, and there is not a single remonstrance.

When it is taken into consideration that this most useful and unpretending class of men are the last to complain, and the last to ask legislative aid, the committee are strongly impressed with the belief that such aid is needed, and that the prayer of the petitioners ought, in some form, to be granted.

About eight-tenths of the whole population of this State is agricultural; and when it is admitted that a thorough knowledge of agriculture in all its branches requires the possession of as great talents, as much and by far more varied learning than most of the learned professions and mechanic arts, it seems amazing that there should be no school, no seminary, no subdivision of any school in which the science of agriculture is taught.

We have schools, professors and teachers of divinity, physic and law—for painting, music and dancing—all sciences, from the most holy to the most profane—from the most sublime to the most ridiculous—in the arts of war and the arts of peace—but in the science of agriculture, a business which occupies eight tenths of all our population, and which is the basis of all our arts and the foundation of our whole system of civilization, we have no professor, no teacher, no school. We have tradition, and tradition alone.

Hence it is, that while all other sciences have advanced towards perfection, and some with a rapidity bordering on the miraculous, the science of agriculture has remained stationary, and the scholar who will take the pains to review the studies of his youth, will find in the Georgics of Virgil that the science of agriculture was as far advanced when the Roman bard sang as now.

It was then, as now, believed that the necessary tendency of seeds, and plants, and animals, was to degenerate, and that the soil as it was wrought must of necessity grow poor and barren, and they looked back with melancholy pleasure to the golden and pastoral ages which were past, and mourned that the age of iron was upon them. To inspire a more cheering belief, to produce an entirely different and more flattering result, should be the object of those who make laws.

It is thought that legislative enactments stimulating industry, directing it correctly, and suggesting new objects for its action, would produce this beneficial result.

It cannot have escaped observation that our soil is not as fertile and productive as it once was, that the quantity of most of our staples has diminished and their quality deteriorated, and of course that the farmer, who, year after year, finds the production of his farm diminishing, although his number of acres may remain the same, is actually wasting his patrimony, and contrary to all rules of economy is living, not on his income, but on his capital.

It is therefore supposed that agricultural pursuits cannot be as profitable as other employments, and hence the great strife seems to be, not to render the business itself honorable and profitable, but to escape from it to some more fashionable pursuit, or to abandon farms which are supposed to be worn out, and go in pursuit of new lands, and not profiting by the experience of the past, go through with the same system of deterioration again.

Hence the overweening desire to become professional men, to become merchants, speculators. Hence the continued rush of our inhabitants to the west, though, not merely the fortunate isles, but the fortunate portion of the continent too, lay at the west.

This western fever should, if possible, be cured; this mania for emigration should be checked as exhausting to the State abandoned, and too often disastrous to the emigrants themselves. The State loses its native population and its wealth; the emigrant his home, his friends, his school house, the library, the church and the innumerable things which improve human nature and sweeten life.

It is true that in some parts of this State our fruit has become diseased, and the trees themselves go to premature decay; that the peach and the melon once so abundant are becoming strangers, and our great staple—wheat—is an uncertain crop; and its culture abandoned where it once abounded. Even the bee, that admired insect, which administers so much to our comfort, while it sets so bright an example of industry, neatness, art and good government, has become a prey to some curse of this iron age. New and unheard of diseases have afflicted our cattle, and the labor of years has been swept away by some nameless and fatal disease. Discouraging as the

facts at first appear, the difficulties are not insuperable; they furnish a strong incentive to that ingenuity and talent for useful invention which our countrymen possess in so eminent a degree. To mitigate certainly, and perhaps to subdue, most of these evils, is within the scope of man's power. Does any one despair of renovating and fertilizing a worn-out soil, we could point him not merely to farms but to whole counties in this State, where, under an improved system of husbandry, the products have been more than doubled; we would direct his attention to Belgium, once the most barren, now the most productive soil in Europe. Does any one despair of arresting the progress of the disease amongst his cattle, he should remember that a scourge, more deadly than the plague, has been disarmed of its power. And the committee believe that science has in store a remedy for the insects which destroy our crops as certain, and probably as simple, as that which ejects the moth from our wardrobes.

It is not for the countrymen of Franklin and Fulton to despair; it is peculiarly for them to meet, encounter and subdue, as well the smaller, as the greater ills of life.

The farmer of the State of New York would think he was abused if he were told that his house was neither handsome nor cheap; that from the defects in its structure, it was too often the abode of vermin, and the workshop where disease was generated.

He would be still more scandalized if he were told that the health of his wife was often impaired, and perhaps her life shortened, by the inconvenience of his dwelling.

He would hardly give credence if he were told that by a judicious choice of situation, and proper structure of his barns and yards, and sheds, at least one quarter of the forage fed to his cattle during the winter, might be saved, and the condition of his stock improved, and the tending of his cattle at all seasons and in all weathers, be rendered a neat and pleasant task.

He would be still more incredulous if he were told that the profits of all his stock might be increased at least a quarter, by a judicious selection of improved breeds.

If he were informed that an old worn-out field could be easily and profitably fertilized, and that by a judicious rotation of crops it might be continually tilled, and not exhausted or impoverished, he would probably express his total disbelief of the fact.

If you called him a pirate, and told him that he robbed and killed without mercy or motive, that the object of his piracy was his servant, a most ingenious and industrious mechanic, who toiled without pay, and clothed and boarded himself, he would probably call you a slanderer, and threaten to hand you over to the buffetings of his lawyer; his wrath, might, however, subdue, when you explained to him that the faithful servant, whom he robbed and killed, was the bee, and that by a slight tax, or "judicious tariff" on his industry, he would get more honey and perpetrate no crime.

Should you inform him that on his own good farm existed the elements of the silk, the sugar, and perhaps the grapes; that there was scarce a waste spot on it but that something useful might be induced to grow; that it was his duty to pro-

pagate the walnut, the chesnut, the locust and the cedar; that the former would supply him with nuts, and the latter with imperishable timber, and while growing give shade to his cattle and ornament to his farm, he might call you a visionary projector, or plead his reluctance to do anything for posterity—posterity having done nothing for him.

Should you inform him the growth and manufacture of silk presented a new branch of industry peculiarly adapted to females and children, by which his daughters would enjoy better health, become far more useful in society—a profit rather than a burthen to their parents—he might express his incredulity, but at the same time his hopes that such was the fact. For he might recollect the time when his mother carded, spun and wove, in the good old fashioned days of honest industry—when dandies and dyspepsia, and the western fever were unknown, and when to do something useful, had not yet become either unfashionable or degrading.

The committee are of opinion that this criticism is in the main just, and that by the judicious application of science to agriculture, that all, nay, more than is professed, may be performed.

The committee are deeply impressed with the belief, that by legislative aid, such an improved system of agriculture may be introduced as will render the business both honorable and profitable, and that for many years, the State of New York might retain her whole native population.

That the population, becoming more dense, the farms smaller and better cultivated, and of course more productive, the roads improved, the school house and the church, and the library, more convenient, the manners and morals of the whole people would be improved, and their character elevated, and this State at no very distant period become an empire in fact, as it is in name, the happy honored abode of ten millions of freemen.

The committee look forward to the time when the farm-house shall be the neat and cheerful abode of contentment and industry, wealth and refinement, and the business of agriculture become as honored as it is useful; to check that exhausting mode of cultivation which impoverishes as it advances; to stop the great tide of emigration which, with a current so strong and deep, sets to the west; to mitigate the evils and enhance the pleasures, the profits and the honors of agricultural life; to refine and elevate the character of eight-tenths of the population in the great State, is a work of which any age might justly be proud. And that Legislature, which shall be instrumental in effecting it, may repose securely on the enduring gratitude of a whole people.

Confident of effecting much, and hoping to accomplish all these anticipations, the committee have prepared a bill, which they ask leave to introduce.

"GAP" IN CHICKENS.

The Farmers' Cabinet being a medium through which much useful information has been disseminated, I am induced to send the following remedy for the "gap" in chickens. My little son last

spring undertook the management of the poultry, and was much troubled by his young chickens dying off with the above mentioned disease. He finally discovered the cause by dissecting one, and numerous long worms, about the thickness of a pin, were found in its windpipe. He then took a feather, and stripped it except a small tuft on the end, dipped it in spirits of turpentine, and inserted it into the windpipe of the affected chickens, turning it around three or four times before withdrawing it. It was attended with the most complete success, and appeared to give almost immediate relief. In a few cases it required a repetition. The disease was very soon eradicated from his flock, and he afterwards raised more than one hundred and forty chickens. The entrance to the windpipe is on the top of the tongue and near its root, and may easily be discovered by holding the chicken's bill open a short time.

Delaware co. 1st mo. 1839.

M.

Stretches in Sheep.—The editor of the Maine Farmer gives the opinion of a very intelligent farmer, as to this disorder, that it is caused by costiveness, which is produced by a change from green to dry food when the sheep come to the barn, and that green food, such as potatoes, turnips, &c. will relieve it. He thinks such diet will entirely prevent it.—*Yankee Farmer.*

GRAFTING.

We think the common salve, made of beeswax, rosin and tallow, very unfit for grafting trees. It poisons the limb to which it is applied, and prevents its healing over as it should do. Clay, with a mixture of loam and some manure, so as to prevent its cracking open in dry weather, will answer much better.

Some use the salve by spreading it quite thin on a rag—we should think this less injurious to the tree, as there is less poison in it—but it should not be used in any shape. It may not be generally known, that oil, tallow, or grease of any kind, is injurious to trees. We have known an orchard to be entirely spoiled by the application of fish oil to the bodies of the trees—it closed up the pores. One half drop of sweet oil, such as we eat, will kill the common housefly in less than half a minute after it touches its body—it is supposed to operate so as to close up the pores of the body.

On grafting in a nursery it is best to set the scion as low as possible, then common garden mould piled about it will be sufficient, as we have found on trial.—*Boston Cultivator.*

A YOUNG BULL.

For sale a fine young Bull of the DEVON and TEESWATER breed. He is rising twelve months old, well grown and handsomely marked with red and white. His dam is teeswater and a deep milker.

april 2

EDWARD P. ROBERTS.

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THE Subscriber acknowledges with gratitude the liberal patronage he has received from the public since the establishment of his Repository in 1825.—During this long period he has studied successfully his own interest by identifying them with the interest of his customers in being prompt and faithful in the execution of their orders.

His present facilities of manufacturing agricultural implements, are not surpassed by any other establishment in this country, he can therefore afford them on as reasonable terms as any other person for the same quality of work. His present stock of implements are extensive both in quality and variety, to which he would invite the attention of those who wish to purchase.

A liberal discount will be made to all cash purchasers, and to those who purchase to sell again.

The following names are some of his leading articles viz His *PATENT CYLINDRICAL STRAW CUTTERS*, wood and iron frames, but all with his patent double eccentric feeders, with or without extra Knives, prices varying from \$33 to \$110, subject to cash discount, he challenges the world to produce a better machine for cutting long forage, Myer's *WHEAT FAN* and *ELLIOTT'S PATENT HORIZONTAL WHEAT FANS*, both a very superior article. Fox & Borland's *PATENT THRESHING MACHINES* and Martineaux's *PATENT HORSE POWERS*, also superior articles—A great variety of *PLOUGHS*, wrought and cast Shares, of all sizes and prices; Gideon Davis's improved *PLOUGHS*, of Davis's own make of Patterns, which are sufficiently known to the public not to require commendation; 100 *CORN CULTIVATORS*, also expanding *CULTIVATORS*, both iron and wood frames, and new plan; *TOBACCO CULTIVATORS*.

F. H. Smith's *PATENT LIME SPREADERS*, the utility of which has been made known to the public; together with a general assortment of *FARMING IMPLEMENTS*; *PLOUGH CASTINGS* of every description and superior quality kept constantly on hand at retail or by the ton; also, *MACHINE* and other *CASTINGS* furnished at short notice and on reasonable terms, his iron Foundry being furnished with the best materials and experienced workmen with ample machinery running by steam power for turning and fitting up machinery.

ALSO—Constantly on hand D. Landreth's superior *GARDEN SEEDS*;—In store *POTATOES* and common *SEED OATS*, *TIMOTHY* and *HERDS SEEDS* all of superior quality.—All orders will be promptly attended to.

JONATHAN S. EASTMAN,

Farmers' Repository, Pratt street,
Near the Baltimore & Ohio Rail Road Depot.

A SETTER FOR SALE.

The subscriber has for sale a thorough bred Setter, eleven months old. He has been but little hunted but gives indication of making a first rate dog. He comes of a strain remarkable for their fine performance in the field, and is a beautiful rich brown white in the breast and face. His price is \$30. All applications by letter must be post paid.

fe 26

EDWARD P. ROBERTS.

SEEDS, PLANTS, FLOWERS.

The subscriber offers for sale at his establishment a fresh supply of *GARDEN SEEDS* of the very best quality; those that cannot be grown in this country he imports direct from Europe from a source that can be relied on.

Besides a large collection of *GREENHOUSE*, hardy *ORNAMENTAL TREES* and Shrubs, Herbaceous Plants, and Bulbous Roots, and a choice collection of the very finest double Dahlias offered for sale, all on reasonable terms, wholesale or retail.

Also on hand a few bushels of *ITALIAN RYE GRASS*, with 100 bush. *ITALIAN SPRING WHEAT*, of the true kind. All orders for Fruit and Ornamental Trees, or any thing appertaining to his establishment will be strictly attended to, by

JOHN FEAST,
Florist & Seedsman, cor. of Lexington and Pine sts.

ja 22 tf

Baltimore.

POTATOES.

1,500 bushels *POTATOES*, from Portland, Minnain good order for sale in parcels to suit purchasers by

WILLIAM CHILD,

mh 12 31§

No. 88 South Street, Bowly's wharf

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every MONDAY

	PER	FROM	TO
BEANS, white field,	bushel.	2 50	—
CATTLE, on the hoof,	100lbs	11 00	—
CORN, yellow	bushel	88	89
White	"	85	86
COTTON, Virginia,	pound	14	15 1/2
North Carolina,	"	13 1/2	15
Upland,	"	14 1/2	15
Louisiana — Alabama	"	15	16 1/2
FEATHERS,	pound.	53	—
FLAXSEED,	bushel.	1 56	1 62
FLOUR & MEAL—Best wh. wh't fam.	barrel.	—	—
Do. do. baker's	"	—	—
SuperHow. st. from stores	"	7 12	—
" wagon price,	"	7 10	—
City Mills, super.	"	7 00	7 12
" extra	"	—	—
Susquehanna,	"	7 00	7 12
Rye,	"	5 50	5 62
Kiln-dried Meal, in hhd.	hhd.	18 50	—
do. in bbls.	bbl.	4 37	—
GRASS SEEDS, wholes. red Clover,	bushel.	13 00	14 00
Kentucky blue	"	—	—
Timothy (herds of the north)	"	2 75	3 00
Orchard,	"	2 00	2 50
Tall meadow Oat,	"	—	3 00
Herds, or red top,	"	—	1 00
HAY, in bulk,	ton.	12 00	16 00
HEMP, country, dew rotted,	pound.	6	7
" water rotted,	"	7	—
HOGS, on the hoof,	100lb.	9 25	9 50
Slaughtered,	"	9 00	9 50
HOPS—first sort,	pound.	20	—
second,	"	18	—
refuse,	"	—	—
LINE,	bushel.	32	33
MUSTARD SEED, Domestic, —; blk.	"	3 50	4 00
OATS,	"	43	—
PEAS, red eye,	bushel.	—	2 50
Black eye,	"	—	2 50
Lady,	"	—	2 50
PLASTER PARIS, in the stone, cargo,	ton.	4 37	4 50
Ground,	barrel.	1 37	1 50
PALMA CHRISTA BEAN,	bushel.	—	—
RAGS,	pound.	3	4
RYE,	bushel.	95	1 00
Susquehanna,	"	—	none
TOBACCO, crop, common,	100lbs	5 00	5 50
" brown and red,	"	6 00	6 50
" fine red,	"	9 00	12 00
" wrappery, suitable	"	—	—
" for segars,	"	10 00	20 00
" yellow and red,	"	10 00	14 00
" good yellow,	"	10 00	15 00
" fine yellow,	"	12 00	15 00
Seconds, as in quality,	"	6 00	10 00
" ground leaf,	"	7 00	13 00
Virginia,	"	6 00	10 00
Rappahannock,	"	—	—
Kentucky,	"	6 00	8 00
WHEAT, white,	bushel.	—	—
Red, best	"	1 55	1 58
Maryland	"	—	—
WHISKEY, 1st pf. in bbls.	gallon.	40	40 1/2
" in hhd.	"	38 1/2	—
" wagon price,	"	—	41
WAGON FREIGHTS, to Pittsburgh,	100lbs	3 00	—
To Wheeling,	"	3 00	—
WOOL, Prime & Saxon Fleeces,	pound.	50 to 55	—
Full Merino,	"	45 50	—
Three fourths Merino,	"	40 45	—
One half do.	"	35 40	—
Common & one fourth Meri.	"	35 40	—
Pulled,	"	30 33	—
POTATOES, 60 to 70 cts. a bushel.	—	—	—

THE AMERICAN FARMER.

The proprietors of this paper have a few complete sets of this work on hand, which they will dispose of at the reduced price of \$50 a set.

oct. 16

3

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,	barrel.	—	—
BACON, ham new, Balt. cured....	pound.	13 1/2	15
Shoulders, do.	"	11 1/2	12
Haddings, do.	"	12 1/2	—
Assorted, country,	"	10 1/2	11
BUTTER, printed, in lbs. & half lbs.	"	31	50
Roll,	"	25	31 1/2
CIDER,	barrel.	1 75	2 00
CALVES, three to six weeks old....	each.	5 00	6 00
COWS, new milch,	"	30 00	40 00
Dry,	"	—	—
CORN MEAL, for family use,	100lbs.	2 00	2 12
CHOP RYE,	"	—	1 60
EGGS,	dozen.	25	—
FISH, Shad, No. 1, Susquehanna,	barrel.	—	—
No. 2,	"	—	—
Herrings, salted, No. 1,	"	6 00	6 25
Mackerel, No. 1, ———— No. 2	"	—	12 00
No. 3,	"	7 62	—
Cod, salted,	cwt.	3 25	3 37 1/2
LARD,	pound.	12	13 1/2

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

	VIRGINIA.
U. S. Bank,	par
Branch at Baltimore, do	do
Other Branches, do	do
	MARYLAND.
Banks in Baltimore, par	par
Hagerstown, do	do
Frederick, do	do
Westminster, do	do
Farmers' Bank of Mary'd, do	do
Do. payable at Easton, do	do
Salisbury, 1 per ct. dis.	do
Cumberland, par	par
Millington, do	do
	DISTRICT.
Washington, do	do
Georgetown, do	do
Alexandria, do	do
	PENNSYLVANIA.
Philadelphia, par	par
Chambersburg, 1/2	1/2
Gettysburg, do	do
Pittsburg, 2	2
York, 1/2	1/2
Other Pennsylvania Bks. 1	1
Delaware [under \$5], 4	4
Do. [over \$5], 1 1/2	1 1/2
Michigan Banks, 6	6
Canadian do. 10	10
	VIRGINIA.
Farmers Bank of Virgi. 1	1
Bank of Virginia, do	do
Branch at Fredericksburg, 1/2	1/2
Petersburg, 1/2	1/2
Norfolk, do	do
Winchester, 1/2	1/2
Lynchburg, 1	1
Danville, 1	1
Bank of Valley, Winch. 1-2	1-2
Branch at Romney, 1-2	1-2
Do. Charlestown, 1-2	1-2
Do. Leesburg, 1-2	1-2
Wheeling Banks, 2	2
Ohio Banks, generally 3	3
New Jersey Banks gen. 5	5
New York City, par	par
New York State, 1/2	1/2
Massachusetts, 2 1/2	2 1/2
Connecticut, do	do
New Hampshire, do	do
Maine, do	do
Rhode Island, do	do
North Carolina, 2 1/2	2 1/2
South Carolina, 4 1/2	4 1/2
Georgia, 5 1/2	5 1/2
New Orleans, 7 1/2	7 1/2

CHINESE MULBERRY TREES.

American Silk Agency, No. 95, Walnut st. Philadelphia
The subscriber having opened a permanent Agency for the purchase and sale of all articles connected with the culture and manufacture of Silk in the United States, offers for sale all the different varieties of MULBERRY TREES, suitable for raising the SILK WORM; viz: Morus Multicaulis Alpinese, Brussa Multicaulis Seedlings. Morus Expansa, Multicaulis Cuttings, Improved Italian Trees, &c. Also, Cuttings from Norton's Virginia Seedlings, and Cunningham's Prince Edward GRAPE VINES. These vines produce an abundant crop of fruit, warranted not to rot or mildew and are fine for the table, and capable of yielding the finest wines.

S. C. CLEVELAND, Agent.

SILK AGENCY,

Corner of E. and 7th streets, Washington City, D. C.

The subscriber having commenced an Agency for the purchase and sale of SILK MULBERRY TREES, and all articles connected with the growing of Silk, offers for sale the following varieties of Mulberry Trees at Baltimore prices, viz. Multicaulis, Alpinese, Brussa, White Italian and Canton; also Mammoth White Silk Worm's Eggs, warranted to be of superior quality. All the recent publications on silk growing for sale, and subscriptions received for the various periodicals devoted to that subject.

no 20

J. F. CALLAN.

FOR SALE,

A valuable FARM of prime soil, on the Western Run in Baltimore county, about two miles north west of the 14th mile stone of the Baltimore and York turnpike road, and at the same distance from the depot of the Baltimore and Susquehanna rail road, at Cockey's tavern, in a rich, highly cultivated and healthy tract of country.

This farm contains from 260 to 270 acres, having full proportion in wood, much of which is building timber, peculiarly valuable in that neighborhood; is in the best state of cultivation; a considerable part in productive timothy meadow, and the residue of the arable land, not in grain, is well set in clover, the whole under good fencing, laid off into convenient fields, each of which is well watered. The farm has a large quarry of excellent building stone. There are on the premises an apple orchard of select fruit trees, which seldom fail to bear abundantly; a valuable mill seat on the Western Run, with a race already dug. There is no location in the country more favorable for a grist mill, having the advantage of a rich and thickly settled neighborhood, and a good public road leading thence to the turnpike road. Buildings substantial and convenient, being a STONE DWELLING, and kitchen of two stories; a large stone Switzer barn, with cedar roof and extensive stabling below; large hay house and stable for cattle; stone milk house near the dwelling, with a spring of fine never failing water, with other out-houses. On the country road near the mill-seat a good house and shop for a mechanic, under rent to a good tenant. It is well known the lands on the Western Run are in every respect equal, if not superior to any in the county. Adjoining or near are the lands of Col. N. Bosley, Daniel Bosley, Thos. Matthews and others. The water power, with about 20 acres of land, is so situated that they may be detached and sold separately, without injury to the rest of the farm for agricultural purposes. Terms of sale will be liberal. Apply to

NATHANIEL CHILDS,
on the premises, or to
WILLIAM J. WARD,

MOLAND'S IMPROVED SILK SPINNER.

The attention of Silk Manufacturers is invited to the recent invention of an improved Silk Spinner, by Mr. Harrison Holland of this town, for which he has obtained letters patent. It is thought to possess many advantages over any machine now in use for the same purpose. By its peculiar construction, it can be moved by hand, steam or water power, and doubles, twists and spins the silk at one operation. For family use, or persons wishing to manufacture silk in a small way, it is undoubtedly the best invention in use, while it is equally well adapted for factories on the most extensive scale.

A machine in full operation may be seen, or for a more particular description of it, reference may be had to a Circular published by the subscribers, which can be obtained by any one upon application either to

HARRISON HOLLAND, or
STODDARD & LATHROP

Northampton, Mass. Feb. 27. mh 5 6

AGRICULTURAL IMPLEMENTS.

John T. Durdin & Co. encouraged by the favors shown them in the past year, are determined to offer no article to their friends but such as they can warrant, made of the very best materials, finished in a superior manner, of the newest patterns, and at liberal prices.

From John T. D.'s long experience in the manufacture of these articles he flatters himself that he can give entire satisfaction to those farmers, Commission Merchants, Captains and others who may favor him with their orders.

J. T. D. & Co. wish especially to recommend a lately improved and superior "Wheat Fan" as being admirably adapted to clean effectually and fast—price \$25. They invite the attention of the public to their stock of Castings for ploughs or machinery, by the lb. or ton at the lowest prices. Also on sale, New York ploughs, No. 10 1-4 at \$3, No. 11 1-4 at \$3 25, No. 12 1-4 at \$3 75. Repairs in general done with neatness and despatch—any new machine coming into market may be obtained to order.

All orders for field and garden seeds, of the best kinds and fresh, will also be furnished at our Agricultural Establishment, upon the usual terms, by Thomas Denny, seedsman, Grant St. Baltimore, rear of Messrs. Dinsmore & Kyle.

fe 26

Printing, executed at the Farmer & Gardener office, at short notice.

THE FARMER & GARDENER

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, E. P. ROBERTS AND SAMUEL SANDS—EDITED BY E. P. ROBERTS.

No. 50.

BALTIMORE, MD. APRIL 9, 1839.

Vol. V.

THIS publication is the successor of the late **AMERICAN FARMER** and is published at the office, at the N. W. corner of Baltimore and North streets, over the Patriot office, at two DOLLARS AND FIFTY CENTS per annum, if paid within one month from the time of subscribing, or \$3 if after that time. All letters to be postpaid.

BALTIMORE: TUESDAY, APRIL 9, 1839.

QUANTITIES OF MANURE.

"A Subscriber and Young Farmer" has inquired of us what quantity of manure should be put on an acre of land in corn. To this inquiry we reply—

1st. If the manure be stable or barn-yard manure, in an undecomposed state, 20 double horse cart-loads, of 25 bushels capacity, will be ample to produce a *good crop*, if spread broadcast; that 10 such loads will be sufficient for a tolerable crop.

2d. That if he intends to manure in the hill half a shovel full to each will be sufficient, and as the ordinary long handle shovels of the stores hold half a gallon, this will give to an acre of corn planted 4 feet each way, about 85 gallons, or a little better than 3 1-7 loads of manure; but as it is impossible to dole out precise half shovelfuls, we should think five loads about the right quantity per acre.

3d. If ashes is the manure to be used, and it is intended to be applied broadcast 100 bushels to the acre is enough: if used on the hill ten bushels to the acre will be sufficient.

4th. If plaster and ashes are used on the hill, 1 bushel of the former and 5 of the latter will be sufficient. But whether the ground be manured with barn-yard or stable manure, decomposed or undecomposed, the crop of corn will be greatly improved by the use of a *small* portion of plaster and ashes on the hill just as the corn comes up; even a gill to each hill will make a difference of two or three barrels to the acre in good ground.

5. If barn-yard or stable manure be not attainable, a compost formed of marsh mud, road scrapings and lime will be found a good substitute.

6. For root culture, 20 double horse cart loads to the acre is about the proper medium quantity.

7. In conclusion, we would remark, that no matter how much manure our correspondent may apply, he may rest assured of this—that unless he

keeps down the weeds and grass, and has the ground frequently stirred and kept open for the action of the sun, air, dew and rain, he will make but an indifferent crop of corn. As *vigilance* is the price of liberty, so is *cleanliness* that of a good crop of corn.

THE MORUS MULTICAULIS.

What is the latest period at which the Morus Multicaulis can be planted? This question has come to us from so many sources that we must make one general answer do for all.

If the trees are kept in a good state of preservation they may in this latitude and south of us be safely planted as late as the 20th of May. We commenced planting last year on the 10th of May and finished on the 14th, and our trees were the best matured, with the exception of that of Messrs. Collins and Pettigrew, we have ever seen. We desired to get them in last year earlier, but was prevented by the long continued rains of April, and the early part of May, and would now advise every one who intends to plant to do so as early as they can, as a few weeks in the ripening of the wood is a very important consideration.

The editor of the *Cultivator* has mistaken us altogether if he supposes that because we have prescribed a means for burying the *Morus Multicaulis* that we consider it not a hardy tree. The custom of nurserymen and dealers have rendered it necessary to take up their trees for the convenience of selling, and as they necessarily pass into hundreds of hands who do not know how to preserve them, we felt it our duty to lay down a plan. We here advance the opinion, that, wherever they may have had 5 months of growing season, they are as hardy as the oak.

[For the Farmer & Gardener.]

Mr. Roberts :—I have read with interest two communications which have recently appeared in your columns on the subject of the value of Oyster Shell Lime as an improver of the soil, the one by a correspondent who subscribed himself "*a subscriber*" and the other in reply by Dr. *James E. Muse*, a gentleman no less distinguished by his agricultural knowledge than for his zeal in its behalf.

The latter was in response to your request to those who had used it to report the result of their experience, and as the subject was one of deep importance I was highly gratified to find so in-

telligent a gentleman as Dr. M. take it in hand. But I think that in gratifying his powers as a controversialist he omitted to practice that courtesy and candor for which he is usually distinguished, and deduced premises from the communication of your correspondent not to be found on its face; and as I am so old fashioned as to believe that it is not altogether fair to build up an argument upon fictitious premises or deductions not to be justified by the matter in hand, as an ardent friend of agriculture I would beg leave to suggest to the Doctor that the cause is not to be promoted by such means, however ably they may be wielded.

As an impartial umpire between your two correspondents then, permit me to point out a few of those instances in which I think he has unintentionally done injustice to himself and to your correspondent "*a subscriber*," and while I freely admit that I have no doubt from his statement of its highly beneficial effects as a manure on the lands of which he is proprietor, I am equally certain that, in his zeal for that species of manure, he has done your correspondent less than justice when he says he has given none of the conditions in which the experiment was made. Your correspondent expressly states in the communication, that the trial made in 1837, was on a clover ley ploughed in early in June, when it was in full blossom: that the lime used in 1834, was spread on a field, ploughed in the autumn of 1833, off of which on an average two tons of clover per acre was cut in the preceding June: that the trial of 1832, was made with compost, to the fertility of which, and not to the lime he ascribes the benefit. Here the Doctor will certainly perceive are some of the conditions in which the experiment was made, and I am certain that if the Doctor will exercise his accustomed powers of discrimination, he will perceive that the experiments were fairly made, and the results such as to convince any one who had not witnessed benefits elsewhere, that the efficacy of oyster shell lime was at least questionable. In this opinion I do not accord, but as a friend of fair discussion, advance the opinion, and in so doing would further be permitted to remark, that mere difference of opinion between farmers upon the *efficacy* or *inefficacy* of any particular kind of manure, should always be tolerated in most kind feelings, as the cause is the loser whenever unfriendly ebullitions are permitted to mar that harmony which should be the chief object with the brotherhood of agriculturists.

A FRIEND TO BOTH.

[For the Farmer Gardener.]

A LARGE DURHAM CALF.

ANNESLIE, March 29, 1839.

Dear Sir—The heifer Morrisania which I brought on with me last fall from New York, calved on the morning of the 19th inst. I saw the calf first about six hours after the birth, and

from its size was induced to weigh and measure it. The weight was 110 lbs. and measured 3 ft. from the forehead to rump, 2 ft. 9 in. girth, and stands 3 feet in height. It is a bull calf, milk white, except on tip of each ear, which is mottled or red; the sire of this calf is Harlem Comet (white) owned by Charles H. Hall, Esq.; and the dam Morrisania was bred by the same gentleman out of the imported cow Magnet, a noted milker, sent out to Mr. D. Wolf of Westchester, with thorough pedigree.

With respect,
I remain, sir,
Yours, &c. &c.
F. HARRISON.

EASTERN SHORE CATTLE SHOW AND FAIR.

We publish with unmingled feelings of pleasure, the following notice and prospectus of the premiums to be awarded at the Eastern Shore Cattle Show and Fair, to be held in at *Easton*, in Talbot county, Maryland, on the 24th, 25th and 26th days of October next. The premiums are liberal, and judiciously arranged, and we have no doubt that the exhibition will do infinite credit to the patriotic agriculturists of that peninsula, which we have always looked upon as intended by providence as the garden spot of Maryland. Before we conclude, we beg leave to congratulate the public spirited gentlemen who have been instrumental in getting it up, believing as we do that it will be eminently conducive in inspiring the tillers of the earth with that *esprit du corps*, the existence of which is so essential to an enlightened and enterprising prosecution of the pursuits of agriculture.

When will the farmers and planters of the Western shore follow the example here so laudably set them?

[From the Easton Gazette.]

Cattle Show.—We publish in another column, a scale of the premiums to be awarded to the successful competitors at the Cattle Show to be held in this place, in October next. They amount to four hundred and forty four dollars, being eighty four dollars more than those advertised last year.

The premiums offered for crops alone, it will be seen, amount to eighty dollars, and that for the best average acre of thirty contiguous acres of corn, viz: 'thirty dollars,' is we believe, the largest premium ever offered for a single article in this State.—Farmers of the neighboring counties are invited to come and contend for them, they may expect a 'fair field and no favor.'

CATTLE SHOW AND FAIR,

For the Exhibition and Sale of Live Stock, Agricultural Implements and Household Manufactures; to be held at Easton, on Thursday, Friday and Saturday, the 24th, 25th and 26th days of October next; commencing at ten A. M. on each day.

The Trustees of the Maryland Agricultural Society for the Eastern Shore, have Resolved,

that the said show and fair, be held at the place and times above mentioned; and that the following premiums be offered, and awarded to the owners of such articles as may be deemed worthy of them,—viz:

HORSES.

For the best Stallion, thorough bred,	\$10 00
For the best Stallion not thorough bred,	10 00
For the best brood mare, thorough bred,	10 00
For the best brood mare not thorough bred,	10 00
For the best colt,	8 00
For the best filley,	8 00
For the best saddle horse,	5 00
For the best harness horse,	5 00

ASSES AND MULES.

For the best jack, over 3 years old,	10 00
For the best mule over 3 years old,	8 00
For the best mule over 3 years old,	5 00

CATTLE.

For the best bull,	10 00
For the 2d best do,	5 00
For the best bull calf,	10 00
For the best milch cow,	10 00
For the 2d best do,	5 00
For the best heifer,	8 00
For the 2d best do,	5 00
For the best yoke of working oxen,	10 00
For the best beef,	8 00

A description of the mode of feeding is required.

SWINE.

For the best boar,	8 00
For the best boar pig,	5 00
For the best sow,	8 00
For the best sow pig,	5 00

SHEEP.

For the best ram,	6 00
2d best do,	4 00
For the best ewe,	5 00
2d best do,	3 00
For the best pair of wethers over 2 years old,	4 00
For the best do do under 2 years old,	4 00

AGRICULTURAL IMPLEMENTS.

For the best Agricultural Machine or Implement that may be considered new and deserving the patronage of the Society,	10 00
For the 2d best do,	8 00
For the best plough,	5 00
For the best cultivator,	5 00

HOUSEHOLD MANUFACTURES.

For the best sample of domestic sewing silk, not less than $\frac{1}{2}$ oz.	5 00
For the best pair of knit silk stockings of domestic silk,	2 00
For the best sample of cocoons, not less than 5lbs.	2 00
For the best piece of kersey, not less than 10 yards,	4 00
For the best piece of kersey, cotton warp, for laborers, not less than 10 yards,	4 00
For the best piece of flannel, not less than 10 yards,	4 00
For the best piece of cassinet, not less than 10 yards,	4 00
For the best piece of carpeting, not less than 20 yards,	5 00

For the best hearth rug,	4 00
2d best do	3 00
For the best counterpane,	4 00
2d best do	3 00
For the best piece of linen sheeting not less than 12 yards,	4 00
For the best piece of table linen not less than 10 yards,	4 00
For the best piece of table cloth,	2 00
For the best piece of towelling, not less than 10 yards,	4 00
For the best pair of knit woollen stockings,	1 00
For the best pair of knit cotton do	1 00
For the best pair of knit thread do	1 00
For the best pair of laborers shoes,	2 00

The stockings to be of a size for a man or a woman.

The dying of all domestic fabrics to be done at home; in awarding the premiums, regard will be had to the beauty of the colors, figures and texture, as well as to the durability of the articles.

For the handsomest specimen of fancy work, not subject to the above restrictions,

BUTTER.

For the best sample of fresh butter, not less than 5 lbs	4 00
2d best do	3 00
For the best sample of potted butter not less than 10 lbs. and not less than 3 months old,	4 00
For the 2d best sample, under the same restrictions,	3 00

A statement of the manner of making and preserving is desired.

FERMENTED LIQUORS.

For the best sample of domestic wine,	2 00
For the best sample of home made cordial,	2 00
For the best sample of cider of the preceding year, the premium to be awarded to the maker,	2 00
For the best sample of cider vinegar, to the maker.	2 00

CROPS.

For the best crop of Irish Potatoes from one acre.	5 00
For the best crop of Turnips, of any variety, from $\frac{1}{4}$ acre,	5 00
For the best crop of Mangle Wurtzel, from $\frac{1}{4}$ acre,	5 00
For the 10 best contiguous acres of Wheat,	15 00
For the best acre of corn,	10 00
For the best average acre of thirty contiguous acres of corn,	30 00
For the greatest net profit, actually obtained from an acre in one year,	5 00

An average sample of each crop, must be offered for exhibition; and in no case will a premium be awarded, unless satisfactory evidence be produced to the Judges, that the ground has been accurately surveyed, the crop produced carefully measured, and the sample selected, in the presence of not less than two competent and disinterested witnesses.

PLOUGHING MATCH.

For the best ploughing with two horses or mules,	5 00
For the best do with oxen,	5 00

To the successful ploughman in each case	2 00
VOLUNTEER PREMIUMS.	
For the best foal by Tuscarora, dropped in 1839,	8 00
2d best do	4 00
For the best foal by cream coloured Bashaw dropped in 1839,	6 00
2d best do	4 00

No article will be entitled to a premium, unless the bona fide owner of the same, be a resident of the Eastern Shore of Maryland, and a subscriber to the show. The rules and regulations for the cattle show, will be published in due season.

S. HAMBLETON, Chairman.

T. TILGHMAN, Secretary.

March 30, 1839.

DISEASED PEAR AND PEACH TREES.

To the Editor of the Franklin Farmer.

Sir:—It is now about three years since my pear trees and apple trees began to decay in many of the limbs, which dried up and threatened the entire loss of different trees. I trimmed them as far up as I could reach. Having planted them myself, I could not attribute the decay to old age; besides, many people complained of the same thing. I concluded that the cause must have been in the atmosphere, and tried several experiments to counteract the evil, if possible. Last year one of the pear trees seemed to revive considerably. It appears that in France, they have adopted the method of rubbing the trunks and the end of the limbs of their fruit trees with oil, particularly when they are mossy or callous. I tried it therefore upon my largest pear tree, (5 feet 6 inches circumference,) after having carefully scraped off the outer bark, and cleaned the trunk at the branches that form a hollow, and which was full of earth and decayed matter. I poured on some (lard) oil and carefully rubbed the place with it; the tree revived considerably, and bore a few pears, which it had entirely ceased to do for two years back. The present spring will prove whether this success must be attributed to the experiment. Peach trees have likewise decayed lately in this county, and I have lost several very valuable ones within four years; it proceeds from a large white grub which attacks the roots, and kills the tree. At a friend's house, I happened to see a fine peach tree in a very flourishing condition—he told me, that one month before, the leaves were all yellow and that he had taken the earth from around the root, poured in the hole about one gallon of fish brine, and then threw back the earth in the hole. I returned home and did the same to my peach trees, and soon saw them resume a new vigor and healthy appearance in their foliage. Now, it remains for me to try and discover whether this effect is produced by the oily matter or the salt of the fish brine, and in order to ascertain it, I shall rub my trees this spring with fish oil, by means of a brush. If there is an oily principle in all vegetable substances, and that it constitutes one fourth of the weight of manure, and that state is so useful to the tender hairy roots of trees, why should it not be so in preventing the different effects of atmospherical influence when it is vitiated by unknown causes?

There is a wide difference between that exces-

sive credulity which believes every thing, and the propensity to entertain doubt upon every subject or deny every thing. Each of these dispositions may be of great injury to the progress of science. All that reason requires is, to ascertain the truth by repeated experiment guided by reason. I humbly hope, that others may try the above experiments, of which, I will give you the ultimate result this spring.

I am, sir, yours, W. MENTELLE.

MORE ABOUT HOGS.

Any experiments which render the operations of the farmer more certain, or which shall give certain data whereby to calculate the profit or loss of any pursuit in agriculture, are of great value. One trouble in the business of the farm has been, the uncertainty with which the cost and the returns of investments in this occupation has too generally been attended, owing to the remissness of farmers in keeping proper accounts. The keeping of hogs, and the fattening of them, are subjects respecting which much has been said and much been written, but after all, the exact cost, or an exact account current, has but in a very few instances been fairly kept. Arthur Young, many years ago, published some experiments wherein the expenses were laid down, and the profits also minutely. Mr. Colman also published some experiments a few years ago, which we copied into the *Maine Farmer*. These were valuable. Until within a few years it has been generally believed that Indian corn was the only legitimate food for swine, and although they were fed with potatoes and the wash from the kitchen, yet Indian corn after all was the only sure substance wherewithal to produce pork.

Now we are willing to acknowledge the great excellence of this article in feeding and fattening hogs, and almost every other animal—man not excepted, but oftentimes the expense of it is so great as to render it very unprofitable as an article for swine diet.

The experiments and researches of Mr. Colman, if we mistake not, established it as a fact that it should not cost more than four shillings (67 cents) per bushel, in order to render it profitable for making pork when round hogs sold at 6½ cents per pound.

In situations where flour mills abound, the article called pollards, a portion of the ground wheat not fine enough to pack in barrels as flour, is oftentimes used as a food for fattening hogs. According to Young, a Mr. Jebb, a miller of Ireland instituted some experiments to ascertain its value for this purpose. According to him, a barrel which would weigh 84 lbs. paid in feeding and breeding hogs, 18½ cts. per bushel, weighing 21 lbs. by feeding it out to hogs.

Mr. A. B. Allen, of Buffalo, N. Y. who is doing great good in his experiments in breeding and improving swine, and who has produced some excellent animals by his judicious crosses, informs us that he kept his full grown swine last winter, in the best of order almost exclusively on raw potatoes, at a cost, including time of attention of only three cents per day per head; and he gives it as his opinion, that had he possessed an apparatus for steaming their food instead of giving it raw, he would have saved from 25 to 30 per cent on the above trifling cost. He also remarks, and

we think with great propriety—that if this can be done in New York, Maine, with the best soil and climate in the world for the production of potatoes, can do it with much more advantage. —*Maine Farmer*.

RAW AND COOKED FOOD FOR SWINE.

Mr. Editor:—Suppose I had six pigs or shoats to winter, all of the same breed, age and weight. Three of them I place in a dark, warm pen, and the other three in a similar one. I have one hundred bushels of potatoes to keep them on which I divide equally, and feed three with them raw and the other three with them boiled or steamed in such quantities that both parcels will be exhausted in one day, giving them all as much water as they will drink and no other food.—Which three of the pigs will be in the best flesh or condition when the potatoes are all consumed, those fed on raw or those fed on cooked potatoes?

It is known that cooked potatoes will digest easier and pass out of the system sooner than they will before they are cooked, therefore will not those fed on the raw potatoes do better, or lay on flesh, while the others are hungry?

I merely put this question for the consideration of your readers.

A man recently told me that he put a quantity of potatoes into his barn and let them freeze, and they have continued frozen, and he has put them into his boiler to cook in that state, and his swine never did better on potatoes that had not been frozen. It will probably be a convenience to those who have small cellars, to leave their potatoes up where they will freeze, but if they are suffered to thaw they will lose their value. This however, may be regulated by covering them in the barn floor until the weather gets pretty cold and then expose them for a night, and they can then be kept through the winter. If raw potatoes will keep store swine in better flesh than cooked ones, the same principle will apply to apples, pumpkins, squashes, and all kinds of roots.

ENQUIRER.

EXPERIMENT TO RAISE LAMBS TWICE A YEAR FROM THE SAME EWES.

Having heard that the pure bred Dorsetshire ewes would infallibly bring lambs twice in the same year, I purchased, for the purpose of making the experiment, seven ewes on the 2d of December, 1825. They were all in lamb, and by the 28th of that month had yeaned nine lambs. The first of these ewes lambed the second time on the 2d day of July, 1826, the remaining six by the 26th of that month; they brought seven lambs. By the 18th of March, 1827, five of these ewes had lambed the third time; the remaining two on the 29th day of April, and produced, at the third lambing twelve healthy lambs. Thus these seven ewes, in seventeen months from the time of their purchase, brought me 28 lambs, which were all reared in health, and were sold, the first lambs for a guinea and a half each, and the third were sold with the eyes as couples. Besides the 28 lambs, I had a fleece of wool from each of the ewes at midsummer.

Yours, respectfully,

J. P.

[*Farmer's Cabinet*.]

COCOONERIES IN GERMANTOWN.

The Silk business will be fairly commenced in this place, the approaching season. The Cocoonery now nearly completed by Mr. Physic, is an immense structure, beautifully located on a commanding site; and will feed, it is estimated, between three and four millions of worms. It is built on the most approved plan, embracing every convenience and advantage so necessary to the successful prosecution of the business. About one million of worms, we are informed, will be fed the ensuing season, under the superintendence of Mr. K. Spencer, a gentleman well qualified for the task, under whose control the most successful results may be anticipated. His attention to visitors to the building, and his kindness in explaining matters of inquiry connected with the business, have afforded much satisfaction.

Another Cocoonery, of quite extensive dimensions, is also in the course of erection, by Mr. Harmon Osler. It is also beautifully situated on elevated ground, within a short distance of the town, where the soil is eminently calculated for the growth of the tree for feeding. Mr. Osler contemplates feeding, the coming season, about one hundred thousand worms, and being among the earliest in the business, will doubtless from his experience, be fully successful.

There are several other persons who are making arrangements to feed considerable numbers of worms so that the yield of the raw material, may be estimated at something pretty handsome, and certainly very creditable to the enterprise of the village. It may be viewed as an auspicious beginning and indicative of what Germantown is destined to be five years hence. That she will become as celebrated for her silk, as she long has been for her "woollen productions," is as clear as the sun at noonday—and that will be glory enough for the remainder of the present half century.

[Germantown Telegraph.]

ROOT CULTURE.

Extract of a letter from South Cairo, to the Genesee Farmer:

"I attended the meeting of the State Agricultural Society and the State Convention, and while there found a growing interest in the cultivation of the beet, carrot and ruta бага, so valuable to farmers and farm stock, without which the cultivator will never thoroughly improve his farm lands, much less his farm stock. I have, although a novice in farming, taken some little pains and care in raising roots and feeding them to horses and cattle, and consider the carrot first, and the turnip second in feeding properties. From 800 to 1000 bushels of either kind may be produced from an acre, making them not only the best, but the cheapest feed for horses, cattle and all other farm stock.

"Permit me to say a few words in relation to the neat stock of Gen. WILLIAM SALISBURY of Leeds, Greene county, shown me by him while on a visit at his house a short time since. I was struck with the beauty and nobleness of his full-blooded short horned Durham bull—he is large, long and full blooded—is handsome in the head and horns, clean and short in the neck, deep and wide in the chest—body round and large; loin broad; short, small and straight legs; plump and

full in all points, and perfectly kind and gentle.—General Salisbury has some very fine blooded cows and several yearling bulls, some half and others full blooded, sired by his noted bull, and bearing every characteristic of the sire. The Durham cattle are remarkably easy feeders, producing great weight and fine beef at small expense.

R. V. D."

LAKE COURT HOUSE, LA. Jan. 29, 1839.

To the Editor of the Franklin Farmer.

My Friend:—One of the good results of agricultural papers, and more particularly the result of publishing communications over our own proper names, will be found in the fact that it greatly extends our circle of agricultural correspondents and friends, and opens the pent up channels of free expression of opinion, experiments and facts, that would otherwise lie hid and useless, except to the single individual possessed of the knowledge.

The enclosed letter in an apt illustration. Here is a man writing to me in the full persuasion that I have "a happy faculty of communicating my ideas," which he does not possess, when, in fact, he has the faculty of writing a most useful and interesting letter. How useful it would be, if every farmer would detail his experiments, and publish them. If you are as much interested in the enclosed as I have been you will insert it in the Farmer.

Accept my best respects,

SOLON ROBINSON.

AGAWAN, HAMPDEN Co., Mass. }

Dec. 24, 1833. }

Mr. SOLON ROBINSON:—Dear Sir.—I have been much gratified in reading your several communications for the Cultivator. I think I can say without flattery, that in my opinion, you have a happy faculty of communicating your useful ideas. I have followed Agricultural pursuits for about 20 years; during which time, I have made some experiments, with sometimes favorable results, at other times not so favorable; but not to my damage, as I farm upon a small scale, on a farm of about fifty acres. My experiments have been confined principally to the root culture. The idea was first suggested to my mind of writing you a few lines, by seeing in a back number of the Cultivator a recipe for making with despatch "an economical Pumpkin pie." As I have cultivated the Valparaiso pumpkin two or three years, the thought struck my mind I would send you a few seeds of that variety, which if thoroughly ripe surpasses for sweetness any thing of the kind, which I have been acquainted with. I enclose a few seeds from one of the weight of 42 pounds; perhaps you may have the kind, but if you have, a change of seed will not be amiss. On your rich soil they will doubtless double that weight. I plant them as early as the season will permit and not be injured by late frost. When two good sets appear on a branch of the vine as large as a pint bowl, I cut the vine off about a foot from the one outermost, and once a week cut off the runners which come out afterwards; by this means the strength of the vine is thrown into the fruit, which, if the season be good, will be ripe and large—doubtless you could instruct me in the

culture. When I want large pumpkins, I pursue the same method, and have a number of years with success. So much for the pumpkin. I will now say something about the potatoes.

The result of your experiments on the culture of the potatoe, published in the Dec. No. of the Cultivator, is now beside me while I write.—Fifteen years ago the farmers made use of from 18 to 20 bushels of potatoes to seed an acre. Now we use from 8 to 12 bushels and have a superior crop (usual crop from 250 to 400 bushels) as to produce and size. If we reduce our potatoe tops to 5 stalks in a hill by pulling out to that number, we are gainers by it—please try the experiment on a few hills. I agree with you from all my experience on small potatoes. My uniform answer, when asked, "will small potatoes do as well as large to plant?" is, that I had rather have two eyes from a large one, than the whole of a small one. Several years ago potatoes being scarce and dear, and not having enough to plant and eat, I bought 4 bush. English whites. From 2 bushels of the largest, I cut out the eyes, single, the size of a twenty cent piece, and half or $\frac{3}{4}$ of an inch thick in the middle, (reserving the potatoes for family use;) these I planted in drills, 6 inches apart, rows 3 feet distant. Side by side I planted the whole potatoes, same quantity and quality manure, (seed larger than an egg,) hills $2\frac{1}{2}$ feet distant, rows the same distance, (3 feet apart) as the eyes. The produce of the eyes on rows 16 rods long, $1\frac{1}{2}$ bushels more than the whole potatoes, and of a more uniform size, to each 2 rows, or 3 pecks more to the row. The eyes planted nearly twice the number of rows. Since, I have done the same a number of times, and the result generally as good a yield, and always more sizeable tubers. For early potatoes I use the kidneys and Scotch greys. I cut about one third of the potatoe, the seed or eye end, and plant, using the other, the root end, for the pigs. If the seed end contains more than 6 or 7 eyes, I divide it in the centre and make 2 hills of it, planting the seed ends; the crop will be from 1 to 2 weeks earlier—past the centre of the tuber, the root end gives out shoots later and commonly make small tubers. I procured from Albany last spring 1 Rohan of which I made six hills, 2 sets on a piece in each: although nearly burnt up for two months by drought, I had $\frac{1}{2}$ bushel, weight 34 lbs. (the tuber weighed 6 ozs.) July 3d, took 2 eyes from a Scotch grey, planted in a hill made similar as we make the Rohan hills—produce 1st. Oct. fifteen large tubers, two small ones, 17 in all—between three and four quarts by measure—suffered from drought, soil dry and sandy. While on the subject of the seed end of fruit, &c. last year I saw an account that the seed or outer end of the cucumber would be earlier and produce more than to plant the seeds contained in the whole. I accordingly have saved a few taken from about one third back from the seed or outer end—a few of which I enclose for you. I have not proved them myself, but shall the coming season, as also some from the centre of the cucumber—root end, third part, seeds excluded. In other words, I cut the cucumber into three equal parts crosswise, and took seed from two parts which I kept separate, taking none from the stem or root end. Dear sir, you will pardon this long and I fear uninteresting detail, but I consider agriculture as the

foundation on which our national prosperity rests. We cannot be too particular in detailing the results of our experience. I look upon the man who causes two potatoes, or two ears of corn to grow where but one grew before, to be a greater benefactor to mankind than he who conquers empires. I think we have cause to feel proud of the efforts which are now making by worthy men in the agricultural community to raise it to that standard its importance demands.

I should be happy to hold communication with you on any subject within the scope of my limited means of information or experience. My health is not very good at times, being of a slender constitution, I have therefore given up the management of the farm to my son, who lives with me. We have raised of roots the season past 200 bushels ruta бага, 100 bushels sugar beets and about 100 bushels potatoes. We think the beet preferable for milch cows to any other root. The labor is double that required to raise the ruta бага. The raising of mulberry trees is all the rage in these parts now, although we have not gone into it much, expect to do something at it the coming season if health permits.

Sir, yours with respect and esteem,

JONA. E. PERRE.

SOLON ROBINSON, Esq.

THE TOMATO.

A correspondent at Piqua, Ohio, wishes to know how to cultivate the tomato. There are few plants cultivated in the garden that are so little injured by worms or insects as the tomato, and none that bear transplanting better. It is very desirable to have the fruit ripen as early as possible. To have them early they should be planted in a hot-bed, three weeks before the weather would allow their growth in open air. Those who have not hot beds may sow the seed in a small box of earth, which may be kept in a warm situation until they have come up, after which they may be exposed to the light by placing them in windows, or they may be set out of the house in warm days, and brought in at night. By this method plants may be brought forward so as to produce fruit two weeks earlier than when seeds are sown in open ground. When transplanted, they should be set on borders, or near fences, preferring a southern aspect for those intended for the table first.—They should have strong brush set near them, after the manner of bushing peas, as when supported in this way, the fruit is more exposed to the light, ripens sooner, and is of better flavor. Those who would have all the benefit of this fruit should cultivate large yellow, which is the earliest variety, the mammoth, or large red, and the small round red.—*Genesee Farmer.*

RUTA BAGA.

We invite particular attention to the communication of our friend A. J. Crisp, on the subject of Ruta Baga. Here is practical proof of what has been done in Indiana, under very disadvantageous circumstances; as we may all remember the past season as one of uncommon drought—very unfavorable for root crops—indeed the ruta бага crop was a general failure throughout the country. We may therefore look upon this as an uncommon yield for the season; and we doubt not, that with the knowledge he has now obtained

in a good season, our correspondent's crop will equal in amount those raised in any other section of the country.

We hope the readers of the Farmer will be encouraged by the success of our friend Crisp, and try for themselves.—*Indiana Farmer.*

MESSRS. OSBORN AND WILLET—

Dear Sirs:—Having a few spare moments and wishing not to be idle, I have concluded to give you some account of a small crop of the Ruta Baga which I raised the past year, believing that it may induce some of my brother farmers in Indiana to cultivate that most excellent root. There is no doubt but what the soil of this state in many parts is well adapted to the growth of the Ruta Baga, and it is believed that the most of our farming land, with proper culture, and a sufficient coating of long manure, will produce a profitable Ruta Baga crop. It is likely that you recollect my writing to you the last season for Ruta Baga seed, after many efforts to get seed, I at last succeeded in getting a few which I sowed upon eighty eight rods, that is eight rods over half an acre. Being scarce of seed I sowed too thin, for in many places the plants stood three or four feet apart in the rows, owing to the seed being sown too thin, and all not coming up. I sowed a part in drills on the 8th and 9th days of June, and kept a few seed which I sowed broad cast on the 20th of July. From the eighty-eight rods of ground, I harvested two hundred bushels of Ruta Baga, not a very large crop as you may see, but taking into consideration the dryness of the past season, it certainly should be a very satisfactory one. We kept six head of cattle four weeks upon the tops, which they eat very well, and improved in their milk, as our pastures were so burnt up with the drought. The tops very near paid for the cultivation and harvesting. I think in a favorable season the crop would be at least double, or in other words we could produce seven or eight hundred bushels to the acre. I will here ask the farmers of highly favored Indiana, what crop they can raise that will yield half the quantity per acre. In my opinion one acre cultivated in Ruta Baga, will be worth more to the farmer than five acres in corn, and the labor required for the Ruta Baga is very little more than for corn, acre for acre. I have seen and read a great deal concerning the Ruta Baga, and have some practical knowledge of it myself, and will therefore say for the advantage of those wishing to cultivate that root, that from the information that I have, I would say, sow your seed about the last of June, or first of July to insure a crop. I have read of many crops being lost by earlier sowing and also some by late: they may be raised either in drills or broad cast. The Ruta Baga is very fine for sheep, cattle, or hogs, and is said to be very good for horses; they are also very good for the table. We have made use of a great many in our family this season: have fed some to our sheep, cows, and fattened some hogs with them for an experiment, which was very much to our satisfaction. I have sold a quantity for table use and an account of which I have kept, which I will here give for the satisfaction of those who read the Farmer. The amount sold is thirty-three dollars and sixty-two and a half cents. Will not this do tolerably well for the produce of little over half an acre for

the past season, after making use of a great many at home? I am so well satisfied that I expect to cultivate three or four acres another year, and if the farmers of this county (Harrison) can get seed, numbers of them will cultivate the Ruta Baga the next season. From the applications already made to me for seed, I am induced to believe, if I had seed, I could sell fifty dollars worth. I will endeavor to supply as many as I can. I am truly glad to see so many of our farmers laying aside their old prejudices to what is called book farming, and adopting many new theories, which if persevered in will result in lasting benefit to our favored Indiana. Now sirs, if you think the above will be any advantage to the reader of your paper it is at your disposal.

ANTHONY J. CRISP.

February 28th, 1839.

CULTURE OF SILK.

A LETTER OF REPLY TO A CITIZEN OF MARYLAND.

Louisville, (Ky.) Feb. 21, 1839.

DEAR SIR—In answer to your queries respecting the Silk Culture in the West, I can only say, that my time, my occupation, and necessary confinement at home, prevent my giving you the information desired in as satisfactory a manner as could be done by one more conversant with the subject. The facts, however, within my knowledge I cheerfully communicate.

Several persons in this place, and its vicinity, commenced the rearing of the silkworm last summer.

Many persons in the neighborhood are very anxious to engage in the culture of silk as soon as they can procure a supply of the *morus multicaulis*, of which there are very few in this section of country.

In the neighborhood of Brandenburg, Maysville, Frankfort, and at various other places in this State, and at many places in Indiana, the silk culture has been commenced. In these places a great number are preparing to cultivate the *morus multicaulis* (the variety of mulberry most highly esteemed) with the view to embark in the silk culture as soon as practicable after the maturity of their orchards.

At Pleasant Hill, the Shaker settlement on the Kentucky river, silk cravats, pocket handkerchiefs, ladies' dress silk, gentlemen's vesting, and a variety of other goods are manufactured, from silk of their own growing, and are of the finest texture, as lustrous and beautiful as any foreign manufacture I have seen. The most intelligent of the community state that the manufacture of silk is one of their most profitable employments.

During a visit to the village of Economy a few weeks since, I had an opportunity of seeing their silk factories, cocooneries, &c. with which I was very much pleased.

This beautiful and flourishing village is situated on the right bank of the Ohio river, 18 miles below Pittsburgh, and contains about 500 persons, who are all German or of German origin. The same community once resided on the Wabash, in Indiana, at a place called New Harmony. They all possess an equal right or share in the property at Economy, which consists of the village, with its many and large manufactories, and several thousand acres of fertile land, most of it under cultivation.

Here are ten acres of various kinds of the mulberry, planted as orchards. They have been but a short time, not more than two years I think, in the silk culture, and most of their trees are yet small.

They have two large cocoeneries, each two stories high, and fitted up in the most complete manner, with shelves, frames, hurdles, &c. and furnished with baskets for transporting the leaves, machines for cutting them for feeding the worms, and all the necessary apparatus for such operations.

Each cocoonery has a fine cellar, flag pavement, and the sides lined with plank, for storing away the leaves, in order that they may be given to the worms while containing the proper degree of moisture.

Last summer they raised 1400 pounds of cocoons, and on the 18th of January ultimo, they had reeled 150 pounds of raw silk of the best quality.

At the time of my visit numerous applications were daily being made to them, and great prices offered for their trees, which of course were refused, as they had not near as many as they wanted themselves.

In their silk factory they have looms, reels, and all the fixtures for the silk manufacture, which were made in London, of the most approved forms.

Their manufactured articles, such as handkerchiefs, vestings, &c. samples of which I have, have been, to my knowledge, pronounced by many judges of such articles in Philadelphia and Baltimore, to be equal in every respect to any imported from Europe.

Several members of this community informed me that the manufacture of silk was one of the most lucrative branches of their business.

In relation to the silk culture "*in the Western States*," I can give you the general opinion, in giving you my own. I think it *must* succeed. Inquiry is awakened on the subject to an extent that is now irrepressible. I speak from what I have heard, more than from what I have seen. The great anxiety expressed to obtain the mulberry from the Atlantic States (there being no adequate supply here) is partly owing to the profits expected to be realized from cultivating the tree for sale. But, independent of that, the great number who are desirous of going into the silk business as soon as they can obtain food for silkworms, warrants the belief that, in a year or two from this time, several of the Western States will be as far advanced as any of the Eastern States now are. All they want is a supply of the most approved mulberry, and this it is entirely probable they will be able to procure in two or three years. The high prices obtained for the *morus multicaulis* do not appear, as far as I have heard, to be made an objection. The truth is, in comparison to the value of the silk culture to the *Western States*, the price of the mulberry is but as dust in the balance. And to the United States, as a nation, the silk culture certainly offers one of the fairest prospects for an increase of its wealth, independence, and the comfort of thousands of its citizens, that has ever been presented to view.

I am, very respectfully, yours, &c. J. B.

[From the Yankee Farmer.]
SMUT IN WHEAT.

MR. S. W. COLE—Sir: Your esteemed favor was duly received, advising your intention to republish an article that appeared in the *Maine Farmer* in March, 1828, on the Smut in Wheat, and requesting me to forward some additional remarks to insert with it. The time is short, but I now forward what I have been able to prepare.

I shall not touch on the *cause* of the smut in wheat, as I do not find a satisfactory one assigned in the authors I have consulted. On the contrary, "L'Abbe Tepeir, D. M. P. of the Academy of Sciences, &c. and for eight years on the Royal Farm at Rambouillet, making his experiments under the King's eye," expressly assures the public, "that as yet no cause has been assigned for it worthy of notice." He admits a first cause, but that it is now "*propagated by contagion*," and in his experiments he has successfully used inoculation. It is well to quote his own words: "We can communicate, at will, the contagious principle to the corn (that is wheat) we sow. It is sufficient to touch it with the point of a pin, impregnated with the smutty powder, in order to its producing corrupt ears; the more we touch towards the germ, the more will its produce be of that sort." Again, "Wheat blackened by the smut, passed a great many times through a wire sieve, produces fewer corrupt ears than if sown without that operation; but it will produce them, because all the contagious powders is not beat off; that which is in the groove remains, and attacks the grain." Another experiment he mentions, where "fire does not entirely destroy its activity, since the oil and the extract I have obtained by distillation communicates the distemper, though less thoroughly than the powder."

There are "causes which tend to increase the evil," and which the Abbe calls *accessory*, and thus describes:—1. "When seed time is neither preceded, accompanied, or followed by rain, the wheat, all things equal, are the more infested with smut." 2. "If the seed is excessively dry, the crop, other things equal, will be more smutty." 3. "Fresh tillage is more subject to it than old ploughing." 4. "The more deeply the seed is buried, the more susceptible of smut, inasmuch, that in countries where they sow under furrow, they are, other things equal, more subject to it than when they sow superficially under the harrow."

I have thus far given evidence, from a very respectable source, in favor of preparing seed wheat before it is sowed, and the recipe to prepare it is contained in the article republished from the *Maine Farmer*; but it may be well to confirm what is taken from L'Abbe Trapiere, by inserting some extracts from the *Annals of Arthur Young*.

The following is from a communication from William Macao, vol. 6, p. 245: "I have a neighbor in an adjoining parish, that ploughed up an *old border* in a large inclosure, a year or two since, and planted it with wheat, with the rest of the field. The crop was ten times more smutty on that part than on any other part of the field, the seed the same, and sown at the same time, though I believe from an unsound stock."

A note of Arthur Young on this article is as follows: "I have often bought seed wheat that I could neither see nor smell the smut in it at

the time of buying, yet I have found a few kernels in what was skimmed off after swiming it. I am, therefore, a great advocate for dressing with lie and salt, and liming well. Some farmers say that the lime is of no other use than drying the grain, that it may part the better for sowing; but for my own part I think it of great importance, and for this reason: about two or three years back, when we had a general smut in the parish and neighborhood, I noticed a few acres that I had sown when I was out of lime, (but used wood ashes as a substitute,) was a great deal worse than any of that that was limed. The fresher the lime is from the kiln the better; it is also as with salt, &c. as manure for the grain; for I observed this year, that what little I sowed dry, did not come up with so bold a blade as that which was dressed, nor did it vegetate so soon."

It is proper to state here, that Arthur Young, in another place, speaks discouragingly of the use of lime and liming, and as the result of some experiments tried by himself.

I shall close with one more extract, from vol. 5, p. 182. The extract is abridged, but the substance is retained. Sea water is used when it is convenient, otherwise brine. "Let the wheat be stirred about, to enable the dross and light corn to swim at the top; skim it, let it remain in soak twelve hours, then drain it, and slake as much lime, fresh from the kiln, in quantity sufficient to tincture EVERY grain that is prepared, then mix it well with a shovel, keep it *three days before sowing*—it has been kept a month without injury. I have made and been witness to fifty trials of this kind, and never saw it fail in the smallest instance. I have sometimes sowed a *head land with corn as it came from the flail*, and always found it more or less affected with smut."

My object in this communication is to show, from facts, whatever the reason may be on the subject, that the preparation of wheat, in the manner recommended, and as directed to be used in the extract furnished, has succeeded in England, and similar preparations have succeeded with me.

It was my intention to have given some of the experiments made, but in the results there was so great difference, that it could not serve the public so well as facts, in a *course of husbandry* made on a large scale.

I hope what I now send you will answer your purpose.

I remain your obedient servant,

CHS. VAUGHAN.

Hallowell, March 2, 1839.

N. B.—In one instance, a neighbor of mine purchased with me a lot of wheat to sow, known to be smutty. I prepared mine, and he sowed his without—my crop was free from smut, his was not.

C. V.

PREVENTION OF SMUT IN WHEAT.—A kind Providence has made ample provision for the cure of diseases in man and beast; and the *Materia Medica* furnishes a description of what is to be used in the various diseases that afflict the human race. Man can describe his own symptoms when he is diseased; and the experienced physician, from the symptoms described and noticed by himself, can apply the proper remedy; but his success must depend on a right decision of the *cause* of the disease he intends to remove.

In the vegetable world the case is different, and the cause of existing evils in our grain crops is more difficult to ascertain. Still, we admit, when the cause is known, it will aid in pointing out a cure for these evils, whether from disease or insect. But to the farmers in general, whose crops are injured by smut, rust, or the insect, the cause is not of so much importance to them, as a successful means of removing the evil; and if any have discovered a remedy, which they can apply, the end to them is answered.

As the time is near for the sowing of wheat, it is proposed to give a few of the successful means used in England and France for the prevention of smut in wheat. The means used in this country have been given to the public.

The surest means used, and on which the most eminent writers on agriculture agree, are salt and lime. The usual mode is to soak the seed in brine, skim off the floating kernels, and after the seed is removed from the brine to drain, to sift *fresh quicklime of a pure quality* on the seed, as soon as it is sufficiently drained.

The authorities from which extracts are made, and the mode used to prepare the wheat, are now offered.

At Rambouillet, the Royal Farm in France, M. L'Abbe Tepier used lime alone, and the success is thus described by him:

"Of all the processes I have tried, I shall report only the most simple, and that which appears to me to have had constantly the greatest success.

"For ten bushels of wheat, take 4 quarts of *fresh quicklime of good quality* and 62 quarts of water; boil a part of this water, and when it is boiling strew it on the lime—a little cold water will stop the effervescence—stir it up with a stick till the lime is dissolved; turn it into a vessel that will also contain the wheat that is prepared, and let it remain long enough to impregnate the seed sufficiently." This is done in different ways, but he recommends the following: "Throw the seed into those vessels that contain the lime water, and leave it there 24 hours, stirring it a little, and taking off with a skimmer the smutty and bad grains which swim. After that it is taken out to dry."

From the "Bath Papers," a valuable agricultural work, the following extracts are made:

"Sound seeds were taken from a smutty ear of wheat, and a part were rinsed and soaked in simple water; and other seeds of the same sample soaked in a strong solution of salt and water. No difference appeared from the first coming up to the maturity, except in the tittering or the putting out of many more stalks, and in this, and in the fulness of the kernel, and the seeds that were brined were more productive."

Another extract from the same work: "The wheat is to be wetted with *old urine*, three quarts to one bushel, turned about with a shovel till the urine is imbibed; then sift plenty of *quicklime* over it, and turned well over with a shovel, and left in a heap until next morning."

From a work entitled, "The Complete System of Modern Husbandry, by R.W. Dickerson, M.D."

In this work M. L'Abbe Tepeir's *use of lime* is much approved. It is also stated that the use of brine, stirring the seed wheat into it, and skimming off those that swim, is a sure preventive.

For more than thirty years the writer of this article has prepared his seed wheat with brine and lime, and has never had smutty wheat on his farm. There is a little variation in the use of them. The course pursued was to prepare a *strong brine*—pour in the wheat slow, and skim off the kernels that swim, and stir the wheat until the kernels cease to rise; then weaken the brine, putting one or even two parts of water to one of brine, and let the seed remain for twelve to fifteen hours. The seed was then taken from the brine, put in a heap on the barn floor, and good quicklime, slaked for the purpose, was thrown on the heap, and turned with a shovel until every grain was white with lime.

Various attempts have been made to show the cause of smut; but the difference of opinion is so great, and even contradictory, that the question is unsettled. A further communication may be made on this subject, assigning many of the causes for the smut, and may prove useful here, if it induces some of our farmers to pursue the experiment.

C. V.

March 28, 1839.

FEEDING OF COWS.

Respected Sir—Herewith I forward you, by my friend J. W. a long communication on Feeding Cows, which, should it be too long to publish entire, you may (nach deinem Gutachten) according to your judgment abridge.

In my opinion there is one important part which is almost universally kept out of sight in feeding cows—the health of the organ which has to digest and convert the food into such a state as to give healthful nourishment to the system or body. If the same attention were paid to this point as there is to the quality of food, the Cow, the poor and the rich man's friend, would always be healthy, and yield liberally to supply our wants. Many forget to pay attention to this point, and direct their efforts to increase the lactiferous (milk giving) powers of this animal. This is a gross mistake.

Not that I believe we should pay no attention. If these two are attended to, the feeding of milch cows, and neat cattle in general, is plain and simple. With judicious management in feeding the mangel wurtzel, ruta бага, &c. in winter or summer, we may greatly improve the lactiferous powers of the cow, if we do not lose sight of the well established truth, that both the stomach and udders are limited in power, and that great care must be taken not to overload the stomach with too much food, nor the udder with too great a quantity of blood.

It is well observed by a certain writer, that there exists an intimate connection between the fourth stomach and the udder of the cow; and if the former is too much oppressed with food, it becomes inflamed or disordered, and the latter, namely, the udder, sympathises with it, and consequently becomes greatly injured. The time when we are most in danger of thus over-feeding the cow, is when taken from the summer pasture. Great care should be taken at this time.

The best directions I know how to give, in order to prevent the bad effects spoken of, is to feed the cows liberally—that is, give them food often, but in small quantities, especially such as have been lately taken into the dairy—but this must

never be lost sight of—the food should be of the best quality. In eating only a small quantity at one time, the cow ruminates better, and the food is more readily digested and assimilated, or prepared for nourishment; the consequence is, the cow will be in good health, and give much and rich milk.

Roots, especially mangel wurtzel, ruta бага, sugar beet, and potatoes, if properly mixed up with hay, are an excellent food for milch cows; and I believe to steam or cook the roots is a great advantage. But should you not steam the roots, care must be taken to cut them into small slices, and some bran with a little salt added; cut straw and chaff may now and then be added.

Lest you might, on the other hand, stint your cow or cattle, let me tell you that nothing is gained by stinting any kind of cattle, much less a milch cow; for one that is well fed will keep her flesh, and yield twice as much milk as one that is kept indifferently.

A certain English writer on this subject, has said much in these words:

"Come, kind man, give the Cow her food,
By little, and often—but let it be good."

If this rule be properly attended to, and the cow kept perfectly clean, the result will be, your cow will give much and good milk, and breed fine calves. Be sure to give your cow good pure water. Filthy or impure water should by all means be avoided. Perhaps nothing has injured good cows more than impure water; it is one of the most certain causes of abortion, or slipping of the calf. In short it does frequently engender bad udders, scouring, &c.—*Practical Farmer*.

A HERDSMAN WANTED.

An experienced herdsman who knows his business thoroughly, who is acquainted with the diseases and management of cattle, and who is sober and industrious, will obtain a good place and wages by applying to Geo. Beltz, Hoover, Fountain Inn, Baltimore, or to WM. GOLL, Near the first gate on the Frederick turnpike road.
April 9 3t

SEEDS, PLANTS, FLOWERS.



The subscriber offers for sale at his establishment a fresh supply of GARDEN SEEDS of the very best quality; those that cannot be grown in this country he imports direct from Europe from a source that can be relied on.

Besides a large collection of GREENHOUSE, hardy ORNAMENTAL TREES and Shrubs, Herbaceous Plants, and Bulbous Roots, and a choice collection of the very finest double Dahlias offered for sale, all on reasonable terms, wholesale or retail.

Also on hand a few bushels of ITALIAN RYE GRASS, with 100 bush. ITALIAN SPRING WHEAT, of the true kind. All orders for Fruit and Ornamental Trees, or any thing appertaining to his establishment will be strictly attended to, by
JOHN FEAST,
Florist & Seedsman, cor. of Lexington and Pine sts.
ja 22 tf Baltimore.

POTATOES.

1,500 bushels POTATOES, from Portland, Minnain good order for sale in parcels to suit purchasers by
WILLIAM CHILD,
mh 12 3t No. 88 South Street, Bowly's whar

ROBERTS' SILK MANUAL.

Price per single copy, 37½ cts.—to dealers who take 100 copies or more, a deduction of 33½ per cent. discount will be made; to those who take a less number, 20 per ct. will be allowed.

Address E. P. Roberts & S. Sands, Farmer & Gardener office, Baltimore, Md.

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every MONDAY

	PER	FROM	TO
BEANS, white field,.....	bushel.	1 75	—
CATTLE, on the hoof,.....	100lbs	10 00	11 50
CORN, yellow.....	bushel	88	90
White.....	"	85	88
COTTON, Virginia,.....	pound	14	15½
North Carolina,.....	"	13½	15
Upland,.....	"	14½	15
Louisiana—Alabama.....	"	15	16½
FEATHERS,.....	pound.	53	—
FLAXSEED,.....	bushel.	1 56	1 62
FLOUR & MEAL—Best wh. wh't fam.	barrel.	—	—
Do. do. baker's.....	"	—	—
SuperHow. st. from stores	"	7 12	—
" wagon price,	"	7 00	—
City Mills, super.....	"	7 00	7 12
" extra.....	"	—	—
Susquehanna,.....	"	7 00	7 12
Rye,.....	"	5 50	5 62
Kiln-dried Meal, in hhds.	hhd.	18 50	—
do. in bbls.	bbl.	4 37	—
GRASS SEEDS, wholes. red Clover,	bushel.	13 00	14 00
Kentucky blue.....	"	—	—
Timothy (herds of the north)	"	2 75	3 00
Orchard,.....	"	2 00	2 50
Tall meadow Oat,.....	"	—	3 00
Herds, or red top,.....	"	—	1 00
HAY, in bulk,.....	ton.	12 00	16 00
HEMP, country, dew rotted,.....	pound.	6	7
" water rotted,.....	"	7	—
HOGS, on the hoof,.....	100lb.	9 25	9 50
Slaughtered,.....	"	9 00	9 50
HOPS—first sort,.....	pound.	20	—
second,.....	"	18	—
refuse,.....	"	—	—
LINE,.....	bushel.	32	33
MUSTARD SEED, Domestic,—; blk.	"	3 50	4 00
OATS,.....	"	43	45
PEAS, red eye,.....	bushel.	—	2 50
Black eye,.....	"	—	2 50
Lady,.....	"	—	2 50
PLASTER PARIS, in the stone, cargo,	ton.	4 37	4 50
Ground,.....	barrel.	1 37	1 50
PALMA CHRISTA BEAN,.....	bushel.	—	—
RAGS,.....	pound.	3	4
RYE,.....	bushel.	95	1 00
Susquehanna,.....	"	—	none
TOBACCO, crop, common,.....	100lbs	5 00	5 50
" brown and red,.....	"	6 00	6 50
" fine red,.....	"	9 00	12 00
" wrappry, suitable	"	—	—
for segars,.....	"	10 00	20 00
" yellow and red,.....	"	10 00	14 00
" good yellow,.....	"	10 00	15 00
" fine yellow,.....	"	12 00	15 00
Seconds, as in quality,.....	"	6 00	10 00
" ground leaf,.....	"	7 00	13 00
Virginia,.....	"	6 00	10 00
Rappahannock,.....	"	—	—
Kentucky,.....	"	6 00	8 00
WHEAT, white,.....	bushel.	—	—
Red, best.....	"	1 55	1 60
Maryland.....	"	—	—
WHISKEY, 1st pf. in bbls.....	gallon.	—	39½
" in hhds.....	"	—	38½
" wagon price,.....	"	—	41
WAGON FREIGHTS, to Pittsburg,.....	100lbs	2 75	—
To Wheeling,.....	"	3 00	—
WOOL, Prime & Saxon Fleeces,.....	pound.	50 to 55	—
Full Merino,.....	"	45 50	—
Three fourths Merino,.....	"	40 45	—
One half do.....	"	35 40	—
Common & one fourth Meri.	"	35 40	—
Pulled,.....	"	30 33	—
POTATOES, 60 to 70 cts. a bushel.	"	—	—

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,.....	barrel.	—	—
BACON, ham, new, Balt. cured....	pound.	13	15
Shoulders,.... do.....	"	11	12
Middlings,.... do.....	"	12½	—
Assorted, country,.....	"	10½	11
BUTTER, printed, in lbs. & half lbs.	"	31	50
Roll,.....	"	25	31½
CIDER,.....	barrel.	1 75	2 00
CALVES, three to six weeks old....	each.	5 00	6 00
Cows, new milch,.....	"	30 00	40 00
Dry,.....	"	—	—
CORN MEAL, for family use,.....	100lbs.	2 00	2 12
CHOP RYE,.....	"	—	1 60
EGGS,.....	dozen.	25	—
FISH, Shad, No. 1, Susquehanna,.....	barrel.	—	—
No. 2,.....	"	—	—
Herrings, salted, No. 1,.....	"	6 00	6 25
Mackerel, No. 1, ——— No. 2.....	"	—	12 00
No. 3,.....	"	7 62	—
Cod, salted,.....	cwt.	3 25	3 37½
LARD,.....	pound.	12	13½

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

	VIRGINIA.
U. S. Bank,..... par	Farmers Bank of Virgi. 1
Branch at Baltimore,..... do	Bank of Virginia,..... do
Other Branches,..... do	Branch at Fredericksburg,..... do
	MARYLAND.
Banks in Baltimore,..... par	Norfolk,..... do
Hagerstown,..... o	Winchester,..... do
Frederick,..... do	Lynchburg,..... do
Westminster,..... do	Danville,..... do
Farmers' Bank of Mary'd, do	Bank of Valley, Winch. 1-2
Do. payable at Easton,..... do	Branch at Romney,..... 1-2
Salisbury,..... 1 per ct. dis.	Do. Charlestown,..... 1-2
Cumberland,..... par	Do. Leesburg,..... 1-2
Millington,..... do	Wheeling Banks,..... 2
	DISTRICT.
Washington,..... } Banks, ½ p.c.	Ohio Banks, generally 5
Georgetown,..... }	New Jersey Banks gen. 3
Alexandria,..... }	New York City,..... par
	PENNSYLVANIA.
Philadelphia,..... par	New York State,..... ¾ a 1
Chambersburg,..... ½	Massachusetts,..... 2a 2½
Gettysburg,..... do	Connecticut,..... do
Pittsburg,..... 2	New Hampshire,..... do
York,..... ½	Maine,..... do
Other Pennsylvania Bks. 1	Rhode Island,..... do
Delaware [under \$5].... 4	North Carolina,..... 2½ a 3
Do. [over 5]..... 1½	South Carolina,..... 4a 5
Michigan Banks,..... 6	Georgia,..... 5a 5½
Canadian do..... 10	New Orleans,..... 7a 8

CHINESE MULBERRY TREES.

American Silk Agency, No. 95, Walnut st. Philadelphia

The subscriber having opened a permanent Agency for the purchase and sale of all articles connected with the culture and manufacture of Silk in the United States, offers for sale all the different varieties of MULBERRY TREES, suitable for raising the SILK WORM; viz: Morus Multicaulis Alpinese, Brussa Multicaulis Seedlings, Morus Expansa, Multicaulis Cuttings, Improved Italian Trees, &c. Also, Cuttings from Norton's Virginia Seedlings, and Cunningham's Prince Edward Grape Vines. These vines produce an abundant crop of fruit, warranted not to rot or mildew and are fine for the table, and capable of yielding the finest wines.

S. C. CLEVELAND, Agent.

SILK AGENCY,

Corner of E. and 7th streets, Washington City, D. C.

The subscriber having commenced an Agency for the purchase and sale of SILK MULBERRY TREES, and all articles connected with the growing of Silk, offers for sale the following varieties of Mulberry Trees at Baltimore prices, viz. Multicaulis, Alpine, Broussa, White Italian and Canton; also Mammoth White Silk Worm's Eggs, warranted to be of superior quality. All the recent publications on silk growing for sale, and subscriptions received for the various periodicals devoted to that subject.

J. F. CALLAN.

AGRICULTURAL IMPLEMENTS.

John T. Durning & Co. encouraged by the favors shown them in the past year, are determined to offer no article to their friends but such as they can warrant, made of the very best materials, finished in a superior manner, of the newest patterns, and at liberal prices.

From John T. D.'s long experience in the manufacture of these articles he flatters himself that he can give entire satisfaction to those farmers, Commission Merchants, Captains and others who may favor him with their orders. J. T. D. & Co. wish especially to recommend a lately improved and superior "Wheat Fan" as being admirably adapted to clean effectually and fast—price \$25. They invite the attention of the public to their stock of Castings for ploughs or machinery, by the lb. or ton at the lowest prices. Also on sale, New York ploughs, No. 10 1-4 at \$3, No. 11 1-4 at 3 25, No. 12 1-4 at 3 75. Repairs in general done with neatness and despatch—any new machine coming into market may be obtained to order.

All orders for field and garden seeds, of the best kinds and fresh, will also be furnished at our Agricultural Establishment, upon the usual terms, by Thomas Denny, seedsman, Grant St. Baltimore, rear of Messrs. Dinsmore & Kyle. fe 26

MOLAND'S IMPROVED SILK SPINNER.

The attention of Silk Manufacturers is invited to the recent invention of an improved Silk Spinner, by Mr. Harrison Holland of this town, for which he has obtained letters patent. It is thought to possess many advantages over any machine now in use for the same purpose. By its peculiar construction, it can be moved by hand, steam or water power,—and doubles, twists and spins the silk at one operation. For family use, or persons wishing to manufacture silk in a small way, it is undoubtedly the best invention in use, while it is equally well adapted for factories on the most extensive scale.

A machine in full operation may be seen, or for a more particular description of it, reference may be had to a Circular published by the subscribers, which can be obtained by any one upon application either to

HARRISON HOLLAND, or
STODDARD & LATHROP
Northampton, Mass. Feb. 27. mh 5 6

FOR SALE,

A valuable FARM of prime soil, on the Western Run in Baltimore county, about two miles north west of the 14th mile stone of the Baltimore and York turnpike road, and at the same distance from the depot of the Baltimore and Susquehanna rail road, at Cockey's tavern, in a rich, highly cultivated and healthy tract of country.

This farm contains from 260 to 270 acres, having a full proportion in wood, much of which is building timber, peculiarly valuable in that neighborhood; is in the best state of cultivation; a considerable part in productive timothy meadow, and the residue of the arable land, not in grain, is well set in clover, the whole under good fencing, laid off into convenient fields, each of which is well watered. The farm has a large quarry of excellent building stone. There are on the premises an apple orchard of select fruit trees, which seldom fail to bear abundantly; a valuable mill seat on the Western Run, with a race already dug. There is no location in the country more favorable for a grist mill, having the advantage of a rich and thickly settled neighborhood, and a good public road leading thence to the turnpike road. Buildings substantial and convenient, being a STONE DWELLING, and kitchen of two stories; a large stone Switzer barn, with cedar roof and extensive stabling below; large hay house and stable for cattle; stone milk house near the dwelling, with a spring of fine never failing water, with other out-houses. On the country road near the mill-seat a good house and shop for a mechanic, under rent to a good tenant. It is well known the lands on the Western Run are in every respect equal, if not superior to any in the county. Adjoining or near are the lands of Col. N. Bosley, Daniel Bosley, Thos. Matthews and others. The water power, with about 20 acres of land, is so situated that they may be detached and sold separately, without injury to the rest of the farm for agricultural purposes. Terms of sale will be liberal. Apply to

NATHANIEL CHILDS,
on the premises, or to
WILLIAM J. WARD,

Printing, executed at the Farmer & Gardener office, at short notice.

THE AMERICAN FARMER.

The proprietors of this paper have a few complete sets of this work on hand, which they will dispose of at the reduced price of \$50 a set.

oct. 16

3

THE FARMER & GARDENER

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, E. P. ROBERTS AND SAMUEL SANDS—EDITED BY E. P. ROBERTS.

No. 51.

BALTIMORE, MD. APRIL 16, 1839.

Vol. V.

THIS publication is the successor of the late
AMERICAN FARMER
and is published at the office, at the N. W. corner of
Baltimore and North streets, over the Patriot office, at two
DOLLARS AND FIFTY CENTS per annum, if paid within one
month from the time of subscribing, or \$3 if after that
time. All letters to be postpaid.

BALTIMORE: TUESDAY, APRIL 16, 1839.

ROOT CROPS.

We feel it to be our duty to call the attention of our readers to the propriety of putting in mangel wurtzel, sugar beet, ruta бага, parsnips, or carrots, with a view of feeding their stock next winter and spring. One acre in either sugar beet, mangel wurtzel or ruta бага, in good ground, well tended, if the season be good, will yield enough to sustain ten milch cows from the 1st December till the 1st of May, and we here pledge ourselves, that it will make a difference in the productiveness of the cows of two hundred per cent. We have seen a cow brought up, by feeding on the sugar beet, from two quarts to a gallon and a half a day. As the time has now arrived when every farmer who desires to increase his revenue from his dairy, should lay the ground-work, we have seized the present opportunity of reminding our readers thereof. In the preparation of the ground for any of the root crops, the culturist must not forget—that in proportion to the liberality with which he supplies his soil with manure so will it repay him for his trouble, toil and expense.

Corn.—Let every farmer go ahead with his preparations for his corn ground, not forgetting that manure is the basis of a good crop.

Oats.—It is full time that this crop was in, and as many has been doubtless prevented by the drought from sowing, we would recommend to each to get them in without delay, as early sown oats always most liberally contribute in grain.

We have been favored with a copy of the second annual report on the agriculture of Massachusetts, made by the Rev. Henry Colman, commissioner for the Agricultural Survey of the state. We have read it with pleasure and profit. It contains a vast fund of information connected with the subject of husbandry, and we shall take occasion, hereafter to transfer a portion of it to our

columns in order that our readers may see what can be done by industry and perseverance with a soil by no means fertile. In the mean time we will note down a few instances of the immense product of native cows.

1. He mentions a cow of Mr. S. D. Colt, of Pittsfield, which gave from 1st Dec. till 19th April, 148 days—198 lbs. of butter.

2. A cow belonging to R. Campbell, yields 26 quarts of milk per day.

3. One owned by Hosea Merrill, gives 30 quarts per day.

4. Two cows in Vandeusenville, produced 14 lbs. of butter each per week.

5. A cow belonging to Mr. Millard, of Egremont, produced 14 lbs. of butter per week.

These are a few of the numerous instances given by Mr. Colman, of great product by native cows. The native cows of Massachusetts have proceeded from a cross with the *North Devon*, a breed distinguished for the richness of their milk, but we suspect the great secret of the productiveness of the cows here adduced, consists in the superior care which has been devoted to their raising and subsequent keeping. The people of the east wisely provide themselves with pumpkins and roots to sustain their stock through winter and spring, and hence the generous return as given above.

Morus Multicaulis.—As the season has now arrived when those who intend to cultivate the *Morus Multicaulis* should be putting them in, we again call public attention to the propriety of preparing their ground.

IMPROVEMENT ON CLAYEY AND TENACIOUS SOILS.

An excellent article on this subject, originally written for one of the European journals, has been lately republished by some of the agricultural periodicals in our own country.

The writer says that clayey soils need only to be properly managed, to become the most permanently fertile and productive of any. The treatment which he recommends, is to mix with the soils such substance, mineral and vegetable, as will separate, loosen and mellow it, and to loosen the sub-soil either by the use of the sub-stratum plough, or otherwise, to a sufficient depth to let the surplus water readily pass below the roots of the plants. The proper substances to be applied

to the soil, are vegetable matter, as straw, rushes, even small bushes, saw-dust, animal manures, sand, and where the soil does not contain lime, this would be advantageously added.

We have recently had ocular demonstration of the practicability of ameliorating stiff clayey soil, in a visit to the garden of Mr. RICHARD REEVE, near this town. This gentleman has by skilful and judicious management, brought a soil naturally abounding in clay, to a fine, light, rich mould, or loam, in which almost every kind of fruit and vegetable common to this latitude, flourishes with luxuriance. To effect this improvement he has used large quantities of saw-dust, (which is here conveniently obtained in almost any quantity,) stable manure, and coal ashes. The coal ashes, he feels confident is of as much consequence for his land, as any thing he has used, and he thinks operates as a stimulating manure, aside from their mechanical effect in dividing the particles of clay and making the soil more friable. We think Mr. R. has not used much lime. Perhaps it is not necessary on his soil, as it undoubtedly contains considerable carbonate of lime in its composition, derived from the disintegration of the lime-rock abounding in the vicinity. But we should think that where the saw-dust is used in considerable quantity, lime or ashes should also be applied, in order to correct the acidity which this substance, (especially where it is derived from oak wood,) always possesses. It is true, that the ammonia contained in animal manures, may produce a similar effect to the alkali of the lime or ashes, if the manures are used in sufficiently large quantities. *Zanseeville Gazette.*

Instead of ploughing apple orchards for cultivation in the spring, it is recommended that they be ploughed under, either with or without a coat of manure, in the month of September, roll the furrows down close, harrow and sow with herd grass or red top—reserving a few pounds of clover to be thrown in winter upon the snow. The crop of grass will be abundant with manure; and, without it, the green sward ploughed under, will keep the ground in good condition.

Where the ground is too stony for the plough, a drove of hogs is said to be good for an orchard; these will change its complexion in a short time. An eye should be kept upon them that they do not gnaw the bark of the trees.

New Silk Society. A meeting of citizens of Bucks county, Pa. friendly to the Silk Culture, recently took place, at which the Hon. SAMUEL D. INGHAM presided, for the purpose of forming a County Silk Society auxiliary to the State Society. A committee was appointed to prepare a Constitution to be reported at an adjourned meeting to be held at Newtown, on the 12th inst. Success to it.

[From the Boston Cultivator]

FARMERS' MEETING.

On Monday evening another meeting of the farmers and friends of farmers was held at the State House—Mr. Abbott, of Westford, in the chair.

Mr. Leonard Stone, of Watertown, was present, and was requested to give his views as to the value of apples for feeding cattle and swine, and to tell his mode of managing trees, &c. Mr. Stone said he had fed out many apples to cattle, that he valued them much higher when fully ripe, and that he put large quantities of them in his millhouse and covered them up. That he fed them to his fattening oxen and cows, and that he never had any cattle fatten faster—that he gave them nothing but apples and salt hay, and interval hay, not merchantable—that he had fed them thus four months. He thought his apples worth quite as much as potatoes, and would fatten as fast—that for milch cows they were decidedly better than potatoes—that while he was giving them apples, the milk was rich and the winter butter was yellow—as soon as the apples were gone, he gave the milch cows potatoes, and they produced an immediate change in the milk and in the butter, which was now as white as that which is usually made in winter. Mr. Stone said he had kept his hogs on raw apples, and nothing else, in winter—that he has never tried cooking them—that hogs thrive well on them, quite as well as on potatoes—that his cows eat nearly a bushel a day—that he fed six horses with them, one peck to each per day; that they also had meal, but he thought not more than half so much meal was used when the horses had apples.

He stated that very few of his apples were sweet—that he had many Baldwins and Russets, but they were all refuse apples, as he had picked out all the best for market. In answer to the question whether he had ever bruised these sour apples in order to change their acidity, he said they were much bruised in sorting out the best ones from them, and he ascribed their virtues much to their being very thoroughly ripe when he fed them out.

In setting out trees Mr. Stone said he never cut off the leading shoot on setting or afterwards—that he did not approve of heading down. In grafting cherry trees he had found no difficulty—he splits the limb, and takes care to have it so open as not to be obliged to crowd in the scion—there is a roughness in the cherry wood, and the scion should be cut smooth, and not be bruised in setting—he sometimes grafts when the tree is in blossom—he preserves his scions by setting them in the ground, when he cuts them too early for setting in the tree.

Mr. Stone excited some surprise when he first stated that he had removed a large number of evergreens—white pine and fir—on Mount Auburn, in June and in September, and had not lost one—he put water on the roots for several days after setting, but took up no sod with them, and but little dirt. Mr. Buckminster inquired of him if these were natives of Mount Auburn, or were they first taken from some nursery? He answered that they had been taken from a nursery and planted on Mount Auburn some years before—this explained the whole wonder, for he said the

trees were full of small fibrous roots when he removed them—forest trees are not. He also removed some ash trees at that time, and they lived. He had no difficulty in grafting large apple trees, but he always grafted the small limbs. He never allows any kind of birds to be killed on his premises, nor squirrels—says squirrels will destroy canker-worms. He says we do not trim our plum trees enough—they should be headed down every few years—that the warts on them should be cut out, or cut off. He does not look at the moon when he cuts scions—takes them off sometimes just before setting—never minds which side of a tree stands south—thinks tar not very injurious to trees.

Mr. Samuel Brown, of Pembroke, said he had practised grafting by tying on a paper about the stock, making it in the shape of a funnel, and then filling the funnel with sand, instead of putting on clay or wax—thinks it much better, because it will not crack open in dry weather like clay. He was asked how he kept the sand in when he grafted a horizontal limb—he said there was no difficulty in that case. Mr. Stone uses beeswax, pitch, and tallow, but he merely makes a shin-plaster of it on a rag, and applies it about the stock and scion, so as to exclude air—he thinks this plaster not injurious.

A gentleman by the name of Nichols said August was a better month than April to transplant evergreens. That he had taken them up in the forests in Maine in July, and had them set in August, and do well.

Mr. Brigham, of Westborough, said he was so much in favor of temperance, that he did not make cider from his apples, nor did he cut down his trees—he had heard of their virtues in fattening animals, and he purchased six hogs to try them—he kept these on apples, that were most of them sour, for four months; for the first week or two they lost flesh, but they doubled their weight in four months, on apples only boiled—his apples are mostly sour—keeps them in a cellar—hogs will not eat them raw—for fat hogs chooses to have some apples with the meal. Mr. B. fed three cows on apples twice a day, as many as they would eat—set the milk of these three cows by itself and churned it by itself—the milk increased much, and the cream in proportion—thinks his apples are worth as much as potatoes for milch cows, and they improve the quality of the milk—that his cows will not eat more than half a bushel per day. He has fed apples to cows not in milk and to oxen—cannot see that they fatten them much—he thinks the apples should be fermented after boiling.

Mr. Nichols, of Danvers, showed his mode of grafting—first on small stocks, not more than one fourth of an inch in diameter, and takes a scion of equal size—makes a scarf on the stock and one on the scion one inch long—puts these together, and to keep them so, splits the scion a little way about the centre of the scarf—also, splits the stock midway of the scarf, making thereby a feather edge and a slit in each, and then presses the scion down on to the stock, and ties around it a thread or bandage. He grafts cherry trees about May 1st, by inserting the scion under the bark.

Mr. Stone did not value the white English turnip highly for fattening animals—thought them good to increase the milk.

Mr. Gates, of Worcester, made a few observations; but as we could not distinctly hear all he said, we will not misrepresent him by reporting a part.

QUARTER CRACKS IN HORSES.

Our friend W., whose horse is troubled with quarter cracks, asks us a hard question as to the cause of the evil. The remote cause undoubtedly is the brittleness of the hoof, but the immediate cause may be, and probably was some accident, which separated the horn of the hoof. They are troublesome things, because every motion of the foot is very apt to open it, and thus prevent a union of the parts. We have seen the following process adopted with success: Sew the hoof together by putting a stitch or two of small tough wire across the crack. Then cut across the crack at the top of it, and by keeping the hoof moist it will grow down. The sponge boot, formerly in use, is a very good article to use in such cases. It is a leather boot put over the horse's foot, and lined with sponge, in which was poured warm water, or any other liquor, to keep the horn of the hoof moist, and promote its growth.

It is necessary to keep the horse still, and not allow him to travel much, and thereby strain it open and continually retard the healing operation.—*Maine Farmer.*

Messrs Editors—I have a horse troubled with what (I think) is generally termed quarter cracks; the chops or cracks are on the inside of the fore feet, about two inches from the centre of the heel, and extend from the upper part of the hoof downward an inch or more. The horse is unwilling to travel on ice or frozen ground—quite lame in one foot, from which some blood occasionally oozes when travelling.

Please state (in the Farmer) the probable cause of the above disease, and the best remedy for cough or common horse ail, and for crippling or lameness in pigs. Having moved some fifty or sixty miles, and having a pair of late pigs, too tender to drive and too valuable to leave behind, I prepared them as comfortable lodgings as I was able on board my wagon, (the snow having failed me) but on turning them out after having arrived here, found them quite lame and destitute of appetite. By bleeding and giving sulphur and charcoal, one soon recovered; the other still remained quite lame, but eats tolerably well. Having been before troubled with the same disease in pigs, a surer remedy than I have yet found is very desirable; and if communicated in the Farmer, would doubtless be a general benefit, as I think the disease is somewhat common.

I have recently moved "up in the country," or "up East" if you please, for the purpose of more effectually fulfilling the chief (temporal) end of man, which is (according to the good book) "to till the ground." If you will have the goodness to assist me in curing my horses, (upon which I depend for a team for spring work) not forgetting my pigs, I will endeavor to inform you in the fall "how I've made it"—not forgetting, mean time, to recommend your valuable paper to my good neighbors, who evidently stand in need of agricultural information. W.

Pittsfield, March 16, 1839.

SICK PIGS.—The other query of our correspondent, respecting his *crippled* pigs, we must answer in general terms, not having *seen the patient*.

We should first wash his legs thoroughly with warm water and rub them smartly, ascertaining at the same time if the *oilet* holes are open. We suppose our friend knows there are two or three little holes on the inside of a pig's legs, which the good health of the animal requires to be kept open. We would then shower him whenever the weather was warm enough, putting him in the sun to dry. If this, together with the dosing of sulphur or crude antimony didn't effect a cure, we would put in a rowel, or piece of garget root in his back or brisket. And if that didn't effect a cure, we would *knock him* in the head. *Hog Doctoring* is not very pleasant business. There is nothing *amiable* in the patient—no reasoning with him; and if you attempt to operate upon him, he will raise as great a clamor as he did when the "*devil sheared him*." We never saw but one case of the kind that our correspondent mentions, and that was cured by a rowel put in his back near the loins, and a dosing with crude antimony pulverized—about a great spoonful put into his food three times per day.

[From the Farmers' Register.]

STATEMENT OF THE CULTIVATION AND PRODUCT OF A FIELD OF CORN.

CAMBRIDGE, (Md.) Dec. 29, 1838.

Dear Sir—You requested the *result* of a corn crop which I made this year, and my *mode* of cultivation, with its *rationalia*. Though not original, because the *principles* on which it was made are well known and settled, yet it was unusual; and I have not, elsewhere, known their application in the same manner, in *all respects*.

I have, for several years, tried a few acres under a similar culture; and finding it considerably superior, in all seasons, to the ordinary methods, I extended it this year to forty acres; and though the drought has very much curtailed the product below the promise of the luxuriant *stalks*, yet it is very respectable for *field-culture*.

The field in question was cultivated the previous year in corn, in the ordinary mode, having been the same year *manured*—about thirty loads, and *limed* one hundred bushels to the acre. The then ensuing winter and spring, as early as possible, it was ploughed a moderate depth, about four inches, drag-harrowed and rolled, and drill-planted, in lines four and a half feet apart and twelve inches in the line; single stalks only left in the thinning, which operation was performed by a patent drill-machine, invented by Francis H. Smith, of Baltimore, which I have found useful in many years experience. With one man and two horses, this machine will furrow, drop, cover, and roll down eight or ten acres per day, and with nearly a mathematical precision, in point of *line* and *distance*. The corn, when up, was worked with ordinary cultivators; "*cultivators*," succeeded by one dressing with the "*scarifier*," about six inches deep. This latter implement, which I purchased several years ago of Sinclair & Moore, of Baltimore, has, in my opinion, no *equivalent* substitute in the culture of our corn crop; as by it, the earth may be penetrated and pulverized six or eight inches deep, with two horses, and without

turning up the sward, and exposing it to the drying action of the sun and air. The cultivators, or any other harrows, (I prefer the cultivator) are again used, and continued unceasingly till the sward is rotten, which will generally be about the last of June, when the plough is, for the first time since the planting, introduced to turn up the sward, which, having been so long buried and undisturbed, except by the cutting of the "*scarifier*," and, under the cumulative agency of heat and moisture, is now fully decomposed, and thus incorporated with the soil, which is thereby improved, and adapted to the subsequent wheat or other small grain, which may delight in dainty and well-cooked food, when the corn had flourished upon the vapors and gases of the preparatory process. After the *plough* I take up again the "*cultivator*," or any other harrow, under the classic precept, "*multum adeo, rastris glebas qui frangit inertes*." And the drier the season the more I use it, to promote the absorption of atmospheric moisture, which, at night and in the driest season, is more abundant than is generally supposed; as well as to assist by lightening the *surface* soil, the *transpiration* through it of the waters of the *sub-soil*, which being more forcibly acted upon by the greater permeability of the earth, in this loose, porous, and lightened condition, to the rays of heat, afford a considerable resource of humidity.

You have then my *mode* of culture, and the principles on which it is founded. I never *cross-plough*, even in ordinary wide planting, *until the sward is rotten*. *Because*, by this process it is turned up, and exposed to the drying and evaporating influence of the sun and air, by which even *animal* substances, more putrescent than *vegetable*, may be, and are effectually preserved from putrefaction, as in the ordinary practice of curing, as it is termed, fish, beef, &c. &c. *Because*, I have a finer culture, and the soil is better pulverized without it; and though not a thorough-going advocate of the doctrine of the well known Tull, that "*pulverization is, in itself, sufficient*," yet I hold it an essential co-operative, and without which, the best crop cannot be produced. And, *because*, by the operation of early cross-ploughing, unless under a deeper furrow than my experience will justify, the sward is exposed, before decomposition, to the antiseptic agencies which I have named, and becomes indurated; and, if it can then be subdued at all, it will require much cost and labor; and will, when done, have lost much of its *palatable* constituents.

In consequence of a *sweepstake*, which I have taken upon the crop alluded to—though conceded, and paid over to me without measurement—yet I held it proper, unrequested, to have a subsequent measurement and ascertainment, as accurate as possible, of the product, which I will annex.

The remarkable uniformity of the crop, and the hazard and inconvenience of shelling the whole, so long before a future market, probably of next summer, led me to the following method, viz: "to measure one acre, to have its product carefully ascertained, and to obtain a certificate from a disinterested, judicious, and extensively known character," of the *uniformity* of the growth.

For the latter fact I wrote to Adam Waldie, esq. of Philadelphia, who had recently seen the field in its full growth; and because his well merited

eminence, as an editor and publisher of literary and scientific journals, of extensive circulation, would give additional currency and strength to the fact; and he politely favored me with the following reply:

"I well remember the pleasant ride I had with you through your cornfield. It really required ocular evidence to produce a conviction of the growth of such magnificent corn, in such an unfavorable season. I am really desirous to know the result; to know which, the correct measurement of one acre, I should think, sufficient for all purposes; for the difference must have been too small to notice."

The following certificate of the measurement of one acre, was then made by myself, with affidavit:

I hereby certify, that I carefully measured and marked one acre of my cornfield of the present year, at my Appleby Farm, and requested the overseer to ascertain the product of said acre in corn.

Sworn before JNO. NEWTON,

Justice of the Peace for Dorchester Co.

November, 1838."

The following by the overseer, Mitchell Shore: "I do hereby certify, that I did, at the request of Dr. Muse, carefully ascertain the product of corn on a space in his cornfield, at his Appleby Farm, the present year, measured and marked by him for one acre, and that it contained seventy-one bushels and three pecks of shelled corn, the growth of said space.

Sworn before JNO. NEWTON,

Justice of the Peace for Dorchester Co.

November, 1838."

In this field was contained also, thirty-five acres more, which was planted in the usual manner, at four and five feet distance each way, and leaving *two* stalks upon thinning, when *one* only at a point was left in the other; in all other respects the culture was like the former, except that it was *cross-harrowed* at the close of the cultivation.

It will be observed, that the drill had a little more than nine thousand stalks, and the other about four thousand to the acre. The growth of this was equally good; but the product, though not accurately ascertained, as intended, was unquestionably far short of the *drill*; but not in the ratio of the respective number of stalks—the ears being larger—yet, I think the difference of product per acre, at least one-third in favor of the drill.

I have had, under a similar drill culture, on five acres, and in a less unfavorable season, one hundred bushels per acre; and my present report may not be interesting as to quantity, yet, under the unfavorable circumstance of an unusual drought, and a *field* culture too, the result is flattering; and I have, at least, complied with my promise to make the report.

Your politeness will excuse its length and its blots, when I assure you that the *quo animo* was absent in both offences; and you are at liberty to use it at your discretion, *absolute*.

I have omitted any notice of the geological and topographical character of the field, and will add it concisely, for a fairer judgment in the case.

The field and the farm, with few exceptions, is a level upland, and by the measurement of our State Engineer, is 20 feet above mid-tide of the Great Choptank river, near which it lies; though poor and unproductive when I purchased it some

years ago, yet it was a well constituted soil as to "silicia" and "alumina," the latter rather preponderating, and the former chiefly coarse; but remarkably defective of "calcareous" matter, with which, and nutritive manures, I have largely supplied it; and it is well repaying the cost and labor.

JOSEPH E. MUSE.

P.S.—Exception may possibly be taken by some to the idea of an *antiseptic agency* of "sun" and "air," when it is notorious that the "oxygen" of the air is one of the agents of *putrefaction*, and that "heat" is another; yet, it must be remembered, that these require to be associated with "moisture," to produce the chemical change; otherwise they exert an energetic agency in resisting it; and the presence of the *moisture* must be *fixed* and *continued*; and not such as casual showers, soon evaporated from the surface, would supply.

J. E. M.

[From the New England Farmer.]

MR. BRECK—Within a few days I have received several letters and pamphlets, with a small package of eggs of a new species of silkworm, from the Messrs. Winship, the estimable proprietors of the celebrated nursery in Brighton, which had been presented to them by Captain Charles Hunt, commander of the ship *Switzerland*, which has recently arrived in Boston from France; and I was requested to make such a disposition of them, as would be most beneficial to the country.

By the letter of J. H. Mey, Esq. of Paris, to Capt. Hunt, and which is herewith submitted for publication, it will be perceived that the silkworm eggs, from which the sample transmitted were derived, have been lately introduced into France; and from an article in the first number of "*Le Propagateur de L'Industrie de la Soie*," to which Mr. Mey alludes, it appears that they were brought from Bengal by Captain Vaillant, in the corvette *Bonite*.

I shall translate from the *Propagateur*, for the next number of the *New England Farmer*, the account of an experiment, which was made by Baron D'Hambres-Firmis, in rearing a small colony of these Oriental strangers, at the request of the Minister of Agriculture and Commerce, from whom some of the eggs, that had just been brought from India, were received; and I will at the same time deposit with Mr. Colman, the Agricultural Commissioner of the State, the eggs confided to me for distribution, among such persons as are engaged in the silk culture, as may be desirous of making an experiment, to ascertain whether this species of the precious family of the silk manufacturing insects, will be an acquisition to them and the country, or not; and also an engraved sheet, containing accurate and beautifully colored representations of the insect, in all its various stages and transformations, from the moment it leaves the egg until it reaches the perfect winged state.

There is an advertisement of the Chevalier Soulangue Bodin, announcing that he has for sale, at his celebrated establishment of Fromont, plants of the *Morus Multicaulis*, *Camellia Rhododendron*, *Magnolia*, *Azalea*, *Rose*, *Dahlia*, and *Chrysanthemum*, which you will please to publish until the 1st of May.

The eminent services which the Chevalier Bo-

din has rendered to horticulture, by his extensive and admirably conducted experimental garden and school at Fromont, and his numerous publications on the science and art of horticulture, in all its interesting departments, have rendered him highly distinguished and most deservedly honored in both hemispheres; and whoever may desire to obtain any plants from his vast nurseries, can rely with confidence on receiving the best samples which are to be procured in France, of all the varieties of fruit, forest, and ornamental trees and shrubs, which are cultivated in that kingdom.

Captain Hunt is entitled to the gratitude of his fellow citizens, for his honorable exertions to subserve the interests of his country, in one of its most important branches of industry. Such rare instances of fidelity to the Republic, among the thousands of Americans who visit every portion of the globe, are deserving of the highest commendation; for the introduction of a single new plant, seed, or product, which may give employment to any portion of the people, is often of more momentous consequence to the prosperity of agriculture, manufactures, and navigation, than the annual importation of our whole commercial fleet. Such was the case with the cotton seed, and may be with the silkworm and *morus multicaulis*. Nantucket may well be proud of such an intelligent and patriotic nautical commander, who has evinced a disposition and has a mind sufficiently enlightened and discriminating to ascertain, that the introduction of the minute egg of an insect, may be more creditable to himself and beneficial to the United States, than a return from the coast of Japan, after the accomplishment of the most successful whaling expedition that ever made glad the hearts of the bold, hardy, and adventurous mariners of the storm-beaten island of the illustrious Penn's exemplary and meritorious disciples.

Mr. Mey, who is a citizen of South Carolina, has well earned the thanks of his countrymen, by his active zeal to promote their interests; and it is desirable that other gentlemen, who have as favorable opportunities to transmit whatever may be valuable to their native land, would imitate his generous attention to really *useful* or *interesting* objects, as well as to the worthless pageant-tries, which amuse and occupy most of the time of too many of our ever wandering, yet mere sight-seeing and profitless tourists; who, if they do bring home some foreign article, it is often the fragment of some ancient work of art, and in the acquisition of which they have evinced their *refined taste* in the Elgian manner, by mutilating a superb temple, column, or statue, in the acquisition. A book, or painting, or any whole and complete object, no matter how small, is worth all the baubles and pieces of stone, which illustrate the profound researches of the innumerable "lookers on," male and female, which our modern Viennas annually send forth; and who, if they "have swam in a gondola" on the canals of Venice, have satisfied their lofty notions of foreign travel.

Very respectfully,

Your most obedient servant,

H. A. S. DEARBORN.

HAWTHORN COTTAGE,

Roxbury, March 14, 1839.

PARIS, Jan. 16, 1839.

Capt. Hunt, commander of the
ship *Switzerland* :

Sir—Since you left this city, I have subscribed to a work which treats exclusively of the silkworm, and the cultivation of the mulberry tree, which I send to you, that you may present it to your society, and if they choose they can write to me to subscribe for them. The cost is but eight francs per annum.

I have been promised a species of silkworm, which laid eggs that hatched immediately after. This is but lately known, and a report will be made of it, at our next meeting of the Horticultural Society; so that you have the latest information on the subject, and which but few Frenchmen yet know. If I can, I will send you by the same conveyance some of these eggs, which were brought here by the *Bonite*, Captain La Vaillant, and these are the only eggs produced here from them.

On the 18th of June 49 eggs produced, at the end of 40 days, 12 cocoons. These cocoons produced eggs, which hatched in a cellar, where they were placed, and were removed to a hot-house on the 18th of August, where the heat was up to 147 by Fahrenheit's thermometer. The first day 24 hatched, the next 25, and on the 21st they were all hatched, producing 1036 worms. The first cocoons were small, pointed and soft, the second much larger and solid. The color of the silk was white, yellow, and greenish-yellow, or rather yellow with a tinge of green. The 12 cocoons produced but one male, and another male was procured to fecundate the rest.

I think the species, which it is said produces many crops in its native country, will be valuable; therefore take care of them. I also send a sketch of the different stages of the worm, the eggs of which I beg you will endeavor to distribute.*

Thursday, 3 o'clock P. M. Jan. 17th.—I have succeeded in procuring the *Sina* species of worm, *Syrian* mixed. If they can be separated when hatched it would be better, as they are two different kinds. Keep the eggs which are in the tin box in a cool place, that they may not hatch before the time; you have leaves to feed them with. I think you may have three crops in Boston, with the aid of the *morus multicaulis* leaves.

I am, respectfully,

Your obedient servant,

J. H. MEY.

* It is possible that this silkworm is the variety which is mentioned in an article I furnished for the 12th number of the first volume of your *Horticultural Register*, as being chiefly cultivated in India, for it yields six crops in a year.

H. A. S. D.

VARIETIES OF INDIAN CORN.

The following is an extract from a paper read before the Agricultural Society of Fredericksburgh, Virginia :

The kind of corn cultivated, I believe to be of greater importance than is generally supposed.—Any Virginian who has travelled northwards, must have observed the difference between their crops and ours. He must have seen that the stalks diminish in size, while the crop, per acre, obviously increases; and yet ours is notoriously the soil and climate for growing corn. I think

the difference may be attributed to the kind of corn cultivated, a kind which enables them to plant much thicker than we do. Here, most of us plant a large gourd-seed corn, shooting up a large stalk, bearing generally one, occasionally two ears, and not admitting thick planting.—There, the stalk is low, is planted very thick, and bears two, three, and four small flinty ears. Not farther north than Pennsylvania, I have seen corn planted five feet by four, with three and four stalks in the hill. Counting three stalks at this distance, and allowing three ears to each, any given space, there, will yield seven or eight ears to our one; small ears certainly, but still large enough to account for the great superiority in the product per acre. I commenced with the old full-bred Virginia gourd-seed, and stuck to it for six or eight years; but finding that on common land many stalks were too late in curing, or did not ear at all, determined to change my seed. My next variety was the "Taliaferro white flint." This sort is touched with the gourd-seed, but it is superior to it in having a smaller stock, ripening earlier, bearing more ears, and a harder and heavier grain. I then tried what is called the "Alsop corn," resembling the Taliaferro in other respects, but somewhat smaller in stalk, and superior in number of ears, often producing two, three, and sometimes a greater number of ears. This corn I still plant. I made one experiment with the Maryland twin corn, and thought it as prolific as the Alsop; but the grain being lighter and the stalk taller, it was abandoned. Last winter I purchased in Washington a small quantity of "Baden corn," and planted with it a rich lot of two acres. It came up and grew off well, was the tallest corn I ever saw, averaged five or six shoots to the stalk, and promised at one time to make a great crop. But it suffered nearly twice as much as the rest of my corn, from the heat or drought of the summer, and was broken off by a wind in August, which did very little injury to the rest of the crop. It did not of course fill up or ripen well, and I fed it to hogs. But as it certainly had more shoots than any corn I ever saw, I have saved a small portion to plant again. Its great fault is its extraordinary height. If it can be brought down to a proper standard, retaining its great number of shoots, it will probably turn out to be a very prolific variety.

It will readily be seen, that I consider thicker planting than common essential in making heavy crops of corn per acre. But thick planting with a large kind is out of the question. At the same time, it must be borne in mind, that as we increase the number we diminish the size of the ears, and add to the labor of gathering and husking. Every judicious farmer will decide, from experience, how far he can carry this process; and will stop as soon as he begins to doubt whether he is paid for his additional labor. Dismissing all speculation on this point, I believe we may safely plant any small variety of corn, at the rate of one stalk to every ten square feet on tolerable land, which would give about 4360 stalks, and from six to ten barrels of grain to the acre. I will only add, in conclusion, that although I have frequently been deterred by the influence which custom exercises over the mind of every one, from planting corn as thick as I was inclined to, I have, in no one in-

stance, exceeded the usual rate without adding to the crop.

WM. P. TAYLOR.

Caroline County, Va.

CULTURE OF SILK IN THE UNITED STATES

LETTER TO N. B. STODDART, ESQ.

Some important occupations connected with the affairs of my present situation, have prevented me from attending the General Convention of the Silk Growers, held in Baltimore in the beginning of December last, and I consequently regret having lost an opportunity of conversing with you on the important subject which now occupies the attention of the agriculturists throughout the United States. If I had been so fortunate as to have had an interview with you, I would certainly have been very much gratified with the mutual interchange of our views upon a matter which, in my opinion, deserves greater attention than has been bestowed on it until the present time.

The questions which you addressed to me in your letter of the 29th ultimo, would require a greater development than I can give to them within the limits of an epistolary communication. I shall, however, answer your questions, in the briefest and clearest manner in my power.

As to the general views and doubts expressed by you, in your letter relating to the possibility and usefulness of introducing and encouraging the culture of silk in this country, allow me, dear sir, to say, that I am of a very different opinion. The successful attempts which have been made, at different periods, in some of the Northern and Southern States, and the fine specimens of silk produced in different parts of Massachusetts and Connecticut, affords sufficient proof that not only the climate and soil of the country are suitable to the culture of silk, but even that American silk, if properly managed, might perhaps surpass in quality that of the most favored countries in the world.

Those very specimens, though trifling in quantity, will suffice to show that silk might become one of the richest staples of the United States, should the culture be undertaken on a more extensive scale, and a better method adopted in rearing the silkworm, and in spinning the cocoons.

Suppose now, dear sir, that out of fifteen millions of inhabitants in the United States, one million of them compose that useful and worthy class called farmers. Suppose, again, that only one-half of them would devote six weeks every year to raise a few thousand silkworms. Persons well acquainted with the art of silk-growing, will assure you that the poorest farms, having a few hundred mulberry trees properly cultivated, having a house, however small, and an industrious wife, may, with the least trouble and without any extra expense, give a crop of at least 100 pounds of cocoons. This minimum, obtained from 500,000 farmers throughout the Union, would give us an annual production of 50,000,000 pounds of cocoons, or an average of 6,250,000 pounds of raw silk; which, at the low price of \$4 a pound, would realize an annual production of 25,000,000 of dollars!

This is not an extravagant calculation, nor one of those ridiculous exaggerations which one often meets in certain speeches and addresses, in which the most fantastical prospects are offered to a cre-

dulous audience. It is a calculation founded on what happens in every place where the culture of silk is considered a branch of husbandry and a source of general welfare.

In Italy you could hardly find a poor peasant, in the months of May and June, whose hut does not contain from 50,000 to 200,000 silkworms, by which he will be able to pay the rent of his dwelling, and many other expenses incurred during the whole year. There is no doubt that what is done on a small scale by the poorest and most ignorant labourers in Europe, might be more easily and extensively undertaken by American farmers, whose resources and better accommodations would afford them greater facilities and better success.

By the general impulse, which at the present period is given throughout the whole country to the culture of the mulberry, one would form an opinion that we are on the eve of attaining that great and long cherished object—to make silk the principal staple of the United States.

There is one point, dear sir, in which I entirely coincide with your belief. I do, for instance, believe that among those who seem to be the most fervent and sanguine supporters of the culture of silk, there are a great many who have never raised one silkworm, nor have any intention of doing any thing of the kind. Their only endeavor is to sell, at the most extravagant prices, their stock of *morus multicaulis*, with which they have filled their gardens and nurseries with very little trouble to themselves. The speculation of that favorite and fashionable tree has lately become a real fever among our people. Merchants and speculators of every kind buy and sell the *morus multicaulis* in the same manner that they would bank or railroad stock. What will be the result of this momentary rage, which has raised the price of that plant to a value above all credibility, it is easy to foretell. Those who buy the *morus multicaulis* with the view of forming a regular plantation and feeding silkworms with them, will soon perceive that a tree imported from a climate so different from ours, which cannot stand our winter, and which, by the rapidity of its growth, shows the shortness of its life, must not be preferred to other kinds of mulberry trees, which greater experience and more mature examination have proved to be better adapted to a northern latitude, and more fitted to give the finest qualities of silk. In fact, it must be remembered that the *morus multicaulis*, which will certainly be a very valuable acquisition for some of the Southern countries, was imported into France from Manila, by Dr. Perotte, in 1821; that, in 1822, it was introduced and propagated in Italy by Professor Bonafous, director of the Royal Botanical Garden of Turin. The great facility of propagating it by cuttings, and its very luxuriant growth, excited, at first some enthusiasm among the botanists and silkgrowers in Europe; but the excitement was of short duration. Experience has convinced the agriculturists that a great many plants of that kind were entirely killed by the frost, even in the most temperate districts in Italy; that the drought, so frequent in some parts of Europe during the summer, injures them exceedingly; that its very large leaves are easily spoiled and dried, when taken from the trees to the cocoonery; and that, as they contain a less

"I killed one of the pigs which was 7-8 Bedford; 1-8 Mackey, when nine months old, that weighed 302. He was fed on the slops from the House, during the summer; and the last two months he was fed on meal and corn. When I commenced feeding him on meal he ate about two quarts per day, but after 5 or 6 weeks he would not eat more than one quart per day. He gave the most meat in proportion to the bone, of any hog I ever killed, and I think was the cheapest raised. Others who keep this breed have made the same statement.

There was one of the pure Bedford breed killed in the neighborhood, 14 months old, that weighed 385 pounds, and another 10 months old, that weighed 420 lbs. neither of which had any extra keeping."

"Between the 20th of March and the last of May, I shall have 4 litters of pigs, two of which will be pure Bedford, and two will be 7-8 Bedford and 1-8 Mackey, with which I can supply any persons who may be in want."

J. WINGATE HAINES.

Hallowell, Feb. 13, 1839.

THOMAS JEFFERSON'S OPINION OF FARMERS.

"Those who labor in the earth," he heartily declared, "are chosen people of God, if ever he had a chosen people, whose breasts he has made his peculiar deposit, for substantial and genuine virtue. It is the focus in which he keeps alive that sacred fire, which otherwise might escape from the surface of the earth. Corruption of morals in the mass of cultivators, is a phenomenon in which no age nor nation has found an example. It is the mark set on those, who not looking up to heaven, but to their own soil and industry, as does the husbandman, for their substance, depend on the casualties and caprice of customers. Dependence begets subservience and venality, suffocates the germ of virtue, and prepares fit tools for the designs of ambition. Thus the natural progress and consequence of the arts, has sometimes, perhaps, been retarded by accidental circumstances; but generally speaking, the proportion which the aggregate of the other citizens bear in any state to that of its husbandmen, is the proportion of its unsound to its healthy parts, and is a good enough barometer whereby to measure its degree of corruption."

Correspondence of the Farmer's Register.

CLARKSVILLE, Feb. 12.

MANURING WITH ROTTEN LOGS AND BRUSH.

Upon the testimony of some of the most respectable and veritable gentlemen of Halifax county, Virginia, I shall proceed to give you an account of the remarkable effects of a new and rare manure, as exhibited by an experiment in that county, a few years since. The manure above alluded to, is only rare as to the manner of its application, for in old Virginia it very much aboundeth. The experiment was as follows: A gentleman cut down the pine growth which had covered a piece of land, exhausted and turned out of cultivation by his father or grand-father. As is usual, he suffered the logs and brush to lie upon the land the first summer. In the fall and winter succeeding, he commenced his preparations for a crop of corn, by turning two strokes with a large two horse plough in the same furrow, one turning to the right, and one to the left. This trench thus made, was filled with the logs and brush of the pine trees next convenient to it, which cleared a place for the second furrow; and so on, until this log and brush material was all consumed.—With this preparation he passed over half the land. The balance was simply flushed with the same two-horse plough, and well manured from

the stable and farm-pen. The crop grown on the beds, manured in the hill with pine logs and brush, was not only the best corn of the two, but was unusually rich in its growth, and heavy in its production. The owners of the corn was induced, from its remarkably luxuriant appearance, to pull up one of the logs, during the growing of the crop, to see how it was that such vigor was imparted to it; he found the countless number of little thread-like roots, which mainly contribute to the supply of the vegetable, to have perforated the water-soaked and partly decayed trunks and limbs of the pine trees, buried below.

Here, Mr. Editor, is a fountain of manure, which, in its general diffusion thro' our State, and in its practical good effects, as demonstrated above, bids fair to rival the boasted marl-beds of lower Virginia; and that which has been regarded as an indication of poverty and decay in our lands, may be made the instrument of their restoration and recovery.

Your obedient servant,

T. CARRINGTON.

More Silk Bounty. The Legislature of Illinois, to keep pace with their neighbors, in the encouragement of the Silk Business, have passed a law, granting a bounty of two dollars per pound on all silk raised within that State. The soil and climate of Illinois is represented as peculiarly adapted to the business; and we have no doubt, but that a few years only, will be requisite to give an impetus to the culture and manufacture of silk, unparalleled in any other branch of business, in modern times.

Morus Multicaulis.—The Savannah Republican states that the Chatham Silk Company, located in that county, had lately sold 600,000 morus multicaulis trees, all grown in that vicinity, to be delivered in November next.

The silk Worm.—According to the Silk Cultivist, Judge Spencer, the past season, raised 40,000 silk worms and lost but 4.

SEEDS, PLANTS, FLOWERS.



The subscriber offers for sale at his establishment a fresh supply of GARDEN SEEDS of the very best quality; those that cannot be grown in this country he imports direct from Europe from a source that can be relied on.

Besides a large collection of GREENHOUSE, hardy ORNAMENTAL TREES and Shrubs, Herbaceous Plants, and Bulbous Roots, and a choice collection of the very finest double Dahlias offered for sale, all on reasonable terms, wholesale or retail.

Also on hand a few bushels of ITALIAN RYE GRASS, with 100 bush. ITALIAN SPRING WHEAT, of the true kind. All orders for Fruit and Ornamental Trees, or any thing appertaining to his establishment will be strictly attended to, by

JOHN FEAST,
Florist & Seedsman, cor. of Lexington and Pine sts.
ja 22 tf Baltimore.

A SETTER FOR SALE.

The subscriber has for sale a thorough bred Setter, eleven months old. He has been but little hunted but gives indication of making a first rate dog. He comes of a strain remarkable for their fine performance in the field, and is a beautiful rich brown white in the breast and face. His price is \$30. All applications by letter must be post paid.

to 26

EDWARD. P. ROBERTS.

AGRICULTURAL IMPLEMENTS.

THE Subscriber acknowledges with gratitude the liberal patronage he has received from the public since the establishment of his Repository in 1825.—During this long period he has studied successfully his own interest by identifying them with the interest of his customers in being prompt and faithful in the execution of their orders.

His present facilities of manufacturing agricultural implements, are not surpassed by any other establishment in this country, he can therefore afford them on as reasonable terms as any other person for the same quality of work. His present stock of implements are extensive both in quality and variety, to which he would invite the attention of those who wish to purchase.

A liberal discount will be made to all cash purchasers, and to those who purchase to sell again.

The following names are some of his leading articles viz His PATENT CYLINDRICAL STRAW CUTTERS, wood and iron frames, but all with his patent double eccentric feeders, with or without extra Knives, prices varying from \$33 to \$110, subject to cash discount, he challenges the world to produce a better machine for cutting long forage, Myer's WHEAT FAN and ELIOTT'S PATENT HORIZONTAL WHEAT FANS, both a very superior article. Fox & Borland's PATENT THRESHING MACHINES and Martineaus PATENT HORSE POWERS, also superior articles—A great variety of PLOUGHS, wrought and cast Shares, of all sizes and prices; Gideon Davis's improved PLOUGHS, of Davis's own make of Patterns, which are sufficiently known to the public not to require commendation; 100 CORN CULTIVATORS, also expanding CULTIVATORS, both iron and wood frames, and new plan; TOBACCO CULTIVATORS.

F. H. Smith's PATENT LIME SPREADERS, the utility of which has been made known to the public; together with a general assortment of FARMING IMPLEMENTS; PLOUGH CASTINGS of every description and superior quality kept constantly on hand at retail or by the ton; also, MACHINE and other CASTINGS furnished at short notice and on reasonable terms, his iron Foundry being furnished with the best materials and experienced workmen with ample machinery running by steam power for turning and fitting up machinery.

ALSO—Constantly on hand D. Landreth's superior GARDEN SEEDS;—In store POTATOES and common SEED OATS, TIMOTHY and HERDS SEEDS all of superior quality.—All orders will be promptly attended to.

JONATHAN S. EASTMAN,

Farmers' Repository, Pratt street,
Near the Baltimore & Ohio Rail Road Depot.

A YOUNG BULL.

For sale a fine young Bull of the DEVON and TEESWATER breed. He is rising twelve months old, well grown and handsomely marked with red and white. His dam is teeswater and a deep milker.

april 2

EDWARD P. ROBERTS.

A HERDSMAN WANTED.

An experienced herdsman who knows his business thoroughly, who is acquainted with the diseases and management of cattle, and who is sober and industrious, will obtain a good place and wages by applying to Geo. Beltz, Hoover, Fountain Inn, Baltimore, or to WM. GOLL,

Near the first gate on the Frederick turnpike road.
april 9 3t

POTATOES.

1,500 bushels POTATOES, from Portland, Minhain good order for sale in parcels to suit purchasers by WILLIAM CHILD,
mh 12 3t§ No. 88 South Street, Bowly's whar

ROBERTS' SILK MANUAL.

Price per single copy, 37½ cts.—to dealers who take 100 copies or more, a deduction of 33½ per cent. discount will be made; to those who take a less number, 20 per ct. will be allowed.

Address E. P. Roberts & S. Sands, Farmer & Gardener office, Baltimore, Md.

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every MONDAY

	PER	FROM	TO
BEANS, white field,.....	bushel.	1 75	—
CATTLE, on the hoof,	100lbs	10 00	12 00
CORN, yellow.....	bushel	86	87
White.....	"	84	85
COTTON, Virginia.....	pound	14	15 1
North Carolina.....	"	13 1	15
Upland.....	"	14 1	15
Louisiana ——— Alabama	"	15	16 1
FEATHERS.....	pound.	53	55
FLAXSEED.....	bushel.	1 56	1 62
FLOUR & MEAL—Best wh. wh't fam.	barrel.	—	—
Do. do. baker's.....	"	—	—
SuperHow. st. from stores	"	7 25	—
" wagon price,	"	7 00	—
City Mills, super.....	"	7 50	—
" extra	"	—	—
Susquehanna.....	"	7 37	—
Rye.....	"	5 50	5 62
Kiln-dried Meal, in hhds.	hhd.	18 50	—
do. in bbls.	bbl.	4 37	—
GRASS SEEDS, wholes. red Clover,	bushel.	12 50	14 00
Kentucky blue	"	—	—
Timothy (herds of the north)	"	2 75	3 00
Orchard.....	"	2 00	2 50
Tall meadow Oat.....	"	—	3 00
Herds, or red top.....	"	—	1 00
HAY, in bulk.....	ton.	14 00	16 00
HEMP, country, dew rotted.....	pound.	6	7
" water rotted.....	"	7	—
HOGS, on the hoof.....	100lb.	9 25	9 50
Slaughtered.....	"	—	—
HOPS—first sort.....	pound.	20	—
second.....	"	18	—
refuse.....	"	—	—
LIME.....	bushel.	32	33
MUSTARD SEED, Domestic, —; blk.	"	3 50	4 00
OATS.....	"	43	—
PEAS, red eye.....	bushel.	1 40	1 50
Black eye.....	"	1 40	1 50
Lady.....	"	1 40	1 50
PLASTER PARIS, in the stone, cargo,	ton.	3 25	3 50
Ground.....	barrel.	1 37	1 50
PALMA CHRISTA BEAN.....	bushel.	—	—
RAGS.....	pound.	8	4
RYE.....	bushel.	95	1 00
Susquehanna.....	"	—	none
TOBACCO, crop, common.....	100lbs	5 00	5 50
" brown and red.....	"	6 00	6 50
" fine red.....	"	9 00	12 00
" wraperry, suitable	"	—	—
for segars.....	"	10 00	20 00
" yellow and red.....	"	10 00	14 00
" good yellow.....	"	10 00	15 00
" fine yellow.....	"	12 00	15 00
Seconds, as in quality, ..	"	6 00	10 00
" ground leaf.....	"	7 00	13 00
Virginia.....	"	6 00	10 00
Rappahannock.....	"	—	—
Kentucky.....	"	6 00	8 00
WHEAT, white.....	bushel.	—	—
Red, best.....	"	1 60	1 65
Maryland.....	"	—	—
WHISKEY, 1st pf. in bbls.....	gallon.	—	39 1
" in hhds.....	"	38 1	—
" wagon price.....	"	—	—
WAGON FREIGHTS, to Pittsburgh.....	100lbs	2 25	2 50
To Wheeling.....	"	2 75	—
Wool, Prime & Saxon Fleeces.....	pound.	50 to 55	—
Full Merino.....	"	45 50	—
Three fourths Merino.....	"	40 45	—
One half do.....	"	35 40	—
Common & one fourth Meri.	"	35 40	—
Pulled.....	"	30 33	—
POTATOES, 60 to 70 cts. a bushel.	"	—	—

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES.....	barrel.	13 1	—
BACON, ham new, Balt. cured....	pound.	11 1	12
Shoulders..... do.....	"	12 1	—
Middlings..... do.....	"	10 1	11
Assorted, country.....	"	31 1	50
BUTTER, printed, in lbs. & half lbs.	"	25	31 1
Roll.....	"	1 75	2 00
CIDER.....	barrel.	5 00	6 00
CALVES, three to six weeks old....	each.	30 00	40 00
Cows, new milch.....	"	—	—
Dry.....	"	—	—
CORN MEAL, for family use.....	100lbs.	2 00	2 12 1
CHOP RYE.....	"	—	1 60
Eggs.....	dozen.	25	—
FISH, Shad, No. 1, Susquehanna,	barrel.	—	—
No. 2.....	"	6 00	6 25
Herrings, salted, No. 1.....	"	12 00	15 00
Mackerel, No. 1, ——— No. 2	"	7 75	—
No. 3.....	"	3 25	3 37
Cod, salted.....	cwt.	12	13
LARD.....	pound.	—	—

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

	VIRGINIA.
U. S. Bank,	par
Branch at Baltimore.....	do
Other Branches.....	do
	MARYLAND.
Banks in Baltimore.....	par
Hagerstown.....	do
Frederick.....	do
Westminster.....	do
Farmers' Bank of Mary'd, do	do
Do. payable at Easton.....	do
Salisbury..... 1 per ct. dis.	do
Cumberland.....	par
Millington.....	do
	DISTRICT.
Washington.....	do
Georgetown.....	do
Alexandria.....	do
	PENNSYLVANIA.
Philadelphia.....	par
Chambersburg.....	do
Gettysburg.....	do
Pittsburg.....	do
York.....	do
Other Pennsylvania Bks. 1	do
Delaware [under \$5]..... 4	do
Do. [over 5]..... 1 1	do
Michigan Banks..... 6	do
Canadian do..... 10	do
	VIRGINIA.
Farmers Bank of Virgi. 1	do
Bank of Virginia..... do	do
Branch at Fredericksburg..... 1 1	do
Petersburg..... do	do
Norfolk..... do	do
Winchester..... do	do
Lynchburg..... do	do
Danville..... do	do
Bank of Valley, Winch. 1-2	do
Branch at Romney..... 1-2	do
Do. Charlestown..... 1 2	do
Do. Leesburg..... 1-2	do
Wheeling Banks..... 2	do
Ohio Banks, generally 5	do
New Jersey Banks gen. 3	do
New York City..... par	do
New York State..... 1 1	do
Massachusetts..... 2 1	do
Connecticut..... do	do
New Hampshire..... do	do
Maine..... do	do
Rhode Island..... do	do
North Carolina..... 2 1	do
South Carolina..... 4 1	do
Georgia..... 5 1	do
New Orleans..... 7 1	do

CHINESE MULBERRY TREES.

American Silk Agency, No. 95, Walnut st. Philadelphia
The subscriber having opened a permanent Agency for the purchase and sale of all articles connected with the culture and manufacture of Silk in the United States, offers for sale all the different varieties of MULBERRY TREES, suitable for raising the SILK WORM; viz: Morus Multicaulis Alpinese, Broussa Multicaulis Seedlings. Morus Expansa, Multicaulis Cuttings, Improved Italian Trees, &c. Also, Cuttings from Norton's Virginia Seedlings, and Cunningham's Prince Edward GRAPE VINES. These vines produce an abundant crop of fruit, warranted not to rot or mildew and are fine for the table, and capable of yielding the finest wines.

S. C. CLEVELAND, Agent.

SILK AGENCY,

Corner of E. and 7th streets, Washington City, D. C.
The subscriber having commenced an Agency for the purchase and sale of SILK MULBERRY TREES, and all articles connected with the growing of Silk, offers for sale the following varieties of Mulberry Trees at Baltimore prices, viz. Multicaulis, Alpinese, Broussa, White Italian and Canton; also Mammoth White Silk Worm's Eggs, warranted to be of superior quality. All the recent publications on silk growing for sale, and subscriptions received for the various periodicals devoted to that subject.
no 20 J. F. CALLAN.

AGRICULTURAL IMPLEMENTS.

John T. Durning & Co. encouraged by the favors shown them in the past year, are determined to offer no article to their friends but such as they can warrant, made of the very best materials, finished in a superior manner, of the newest patterns, and at liberal prices.

From John T. D.'s long experience in the manufacture of these articles he flatters himself that he can give entire satisfaction to those farmers, Commission Merchants, Captains and others who may favor him with their orders. J. T. D. & Co. wish especially to recommend a lately improved and superior "Wheat Fan" as being admirably adapted to clean effectually and fast—price \$25. They invite the attention of the public to their stock of Castings for ploughs or machinery, by the lb. or ton at the lowest prices. Also on sale, New York ploughs, No. 10 1-4 at \$3, No. 11 1-4 at \$3 25, No. 12 1-4 at \$3 75. Repairs in general done with neatness and despatch—any new machine coming into market may be obtained to order.

All orders for field and garden seeds, of the best kinds and fresh, will also be furnished at our Agricultural Establishment, upon the usual terms, by Thomas Denny, seedsman, Grant St. Baltimore, rear of Messrs. Dinsmore & Kyle. fe 26

MOLAND'S IMPROVED SILK SPINNER.

The attention of Silk Manufacturers is invited to the recent invention of an improved Silk Spinner, by Mr. Harrison Holland of this town, for which he has obtained letters patent. It is thought to possess many advantages over any machine now in use for the same purpose. By its peculiar construction, it can be moved by hand, steam or water power,—and doubles, twists and spins the silk at one operation. For family use, or persons wishing to manufacture silk in a small way, it is undoubtedly the best invention in use, while it is equally well adapted for factories on the most extensive scale.

A machine in full operation may be seen, or for a more particular description of it, reference may be had to a Circular published by the subscribers, which can be obtained by any one upon application either to

HARRISON HOLLAND, or

STODDARD & LATHROP

Northampton, Mass. Feb. 27. mh 5 6

FOR SALE,

A valuable FARM of prime soil, on the Western Run in Baltimore county, about two miles north west of the 14th mile stone of the Baltimore and York turnpike road, and at the same distance from the depot of the Baltimore and Susquehanna rail road, at Cockey's tavern, in a rich, highly cultivated and healthy tract of country.

This farm contains from 260 to 270 acres, having a full proportion in wood, much of which is building timber, peculiarly valuable in that neighborhood; is in the best state of cultivation; a considerable part in productive timothy meadow, and the residue of the arable land, not in grain, is well set in clover, the whole under good fencing, laid off into convenient fields, each of which is well watered. The farm has a large quarry of excellent building stone. There are on the premises an apple orchard of select fruit trees, which seldom fail to bear abundantly; a valuable mill seat on the Western Run, with a race already dug. There is no location in the country more favorable for a grist mill, having the advantage of a rich and thickly settled neighborhood, and a good public road leading thence to the turnpike road. Buildings substantial and convenient, being a STONE DWELLING, and kitchen of two stories; a large stone Switzerland, with cedar roof and extensive stabling below; large hay house and stable for cattle; stone milk house near the dwelling, with a spring of fine never failing water, with other out-houses. On the country road near the mill-seat a good house and shop for a mechanic, under rent to a good tenant. It is well known the lands on the Western Run are in every respect equal, if not superior to any in the county. Adjoining or near are the lands of Col. N. Bosley, Daniel Bosley, Thos. Matthews and others. The water power, with about 20 acres of land, is so situated that they may be detached and sold separately, without injury to the rest of the farm for agricultural purposes. Terms of sale will be liberal. Apply to

NATHANIEL CHILDS,

on the premises, or to

WILLIAM J. WARD,

Printing, executed at the Farmer & Gardener office, at short notice.

THE AMERICAN FARMER.

The proprietors of this paper have a few complete sets of this work on hand, which they will dispose of at the reduced price of \$50 a set.
oct 16 3

THE FARMER & GARDENER

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, E. P. ROBERTS AND SAMUEL SANDS—EDITED BY E. P. ROBERTS.

No. 52.

BALTIMORE, MD. APRIL 23, 1839.

Vol. V.

THIS publication is the successor of the late
AMERICAN FARMER
and is published at the office, at the N. W. corner of
Baltimore and North streets, over the Patriot office, at two
DOLLARS AND FIFTY CENTS per annum, if paid within one
month from the time of subscribing, or \$3 if after that
time. All letters to be postpaid.

BALTIMORE: TUESDAY, APRIL 23, 1839.

We copied some weeks since a notice from one
of our cotemporaries, of the subscription on the
part of the Legislature of the State of Pennsylvania
for fifteen hundred copies of our *Silk Manual*, for
gratuitous distribution among the people of that
time-honored commonwealth, and we subjoin the
following with the more pleasure, as it emanates
from a source no less impartial than competent to
judge. Praise from such a source disarms one of
those false notions of delicacy which might be
indulged in on ordinary occasions, and is at once
the bond and the license for republication.

ROBERTS' SILK MANUAL.

In the House of Representatives of this State,
the Committee on Agriculture, recommended the
purchase of fifteen hundred copies of Roberts' *Silk
Manual*, for distribution among the people, which
was agreed to. The Manual is the most complete
of any with which we are acquainted. The author
E. P. Roberts, of Baltimore, Editor of the *Farmer
and Gardener*, is the untiring friend of agriculture.
We are pleased to find his labors thus appreciated
by our legislators, and the information which he
has been at so much pains to collect, about to be
so extensively diffused.—*Lancaster (Pa.) Journal*.

We will merely add that in consequence of the
unusually rapid demand for our *third edition*, and
the above order, we were compelled to put a
fourth one to press, which will be speedily ready
for delivery, and it may not be inopportune to
remark, that it will contain much *additional mat-
ter*, which we trust will increase its favorable
consideration with the public.

ROOT CROPS.

The scarcity and dearness of beef cattle seem
to offer a fit occasion for us to urge upon our
agricultural friends the propriety of putting in a
few acres of roots in addition to their usual crops,
for the purpose of feeding their cattle, as every
plan which can be adopted of *saving* the grain

crops should be an object with them, provided
that in so doing they can effect a *saving* of time,
labor and money. Now as we believe all this
can be done by the plan we are about to urge, we
trust it may be favorably considered, and carried
out, so far at least as to make a fair experiment
of its utility. From various experiments made,
it has been reduced to a certainty that one thou-
sand bushels of *mangel wurtzel* or sugar beet can
be raised from an acre of well manured land, and
this number of bushels will not be considered
large when we state, that it will only require that
these roots should weigh 3 lbs. each to give us
this quantity, and that they have been raised to
weigh 22 lbs. For milch cows they are peculi-
arly well adapted, and if given out to them in the
quantity of half a bushel a day, in two meals, say
night and morning, in addition to their usual quan-
tity of hay or fodder, will, during the winter and
spring months, add seventy-five per cent. to their
product in milk and butter, besides greatly in-
creasing the richness and flavor of both. A half
a bushel a day from the 1st of December, till the
1st of May, a period of 151 days—will at the rate
of a thousand bushels to the acre carry 13 cows
well over the whole period of time named, and
leave them at the date named in excellent condi-
tion. As to the mode of keeping beets, no other
care is necessary than is usually given to the pre-
servation of potatoes or turnips. In proof of this we
have sugar beets now, this 19th day of April,
that have been kept in a dry cellar, unprotected
by covering of any kind, that are now as sound as
the day they were taken out of the earth, having
preserved unimpaired all those qualities which
render them a delicious table beet. Having
stated the capacity of an acre, and shown as we
trust conclusively, that it is competent to be made
produce enough to sustain 13 cows from the first
of December until the first of May, we would ask,
to what else could an acre of land be appropri-
ated that would do as much? We know of no
crop that would prove as profitable, and, there-
fore, urge the propriety of a trial upon every far-
mer and planter: They may be planted from the
present period throughout all May, and with pro-
per manuring and culture will produce what we
have stated.

In fattening beef cattle, if given in the quan-
tity of a bushel a day, divided into four meals
with the usual quantity of hay or fodder, they will
prove eminently efficient, and save a vast quan-
tity of corn. Should their culture be adopted there
is no farmer that could not raise four times as ma-
ny cattle for the butchers as he now does, as one
acre in such culture will give him the material for
fattening seven head.

Corn—As early planted corn generally suc-
ceeds best, we would respectfully urge it upon
our readers to get in their corn as soon as possi-
ble, as this work being over they will have the
more time to devote to the other operations of
their estates.

We take pleasure in copying this article, as it
is evincive that the silk culture is taking proper
hold of the enterprising and intelligent people of
the west.

SILK CULTURE.

We understand some of the citizens of our
town and vicinity, within the last two or three
months, formed an Association under the style
of the "*West Tennessee Silk Company at
Somerville*," and design so soon as circumstances
will permit, entering extensively into the manu-
facture of silk. They have ordered from Boston,
New York and Philadelphia, a large supply of
Morus Multicaulis or Chinese Mulberry, which
is expected by the opening of spring.

In conversation with one of the members of the
Association, we were informed that after setting
out their orchard preparatory to the rearing of the
worm and the manufacture of the silk, they would
most probably by the fall, be prepared to receive
and fill orders to a large amount for the cuttings
of this invaluable tree.

This is as it should be; and we are truly pleas-
ed to see our citizens engaging in this laudable
undertaking. We think from the present appear-
ance, the demand for the *Morus Multicaulis* in
the course of twelve months, or perhaps a short-
er time, will be considerable; and the "*West
Tennessee Silk Company at Somerville*," will
have conferred a favor upon the public by open-
ing a market at our doors where this demand can
be measurably supplied.

We are convinced that the experiment has but
to be tried in this country, to satisfy the most in-
credulous, that the culture of silk is to become an
immense source of wealth to the people of the
United States. Already are large investments be-
ing made in the Eastern and some of the South-
ern States, in the culture and manufacture of this
article; and the enterprising adventurers—if in-

deed adventurers they may be called—are realizing handsome profits from their outlays. In some instances as high as one thousand dollars per acre have been made;—all conversant with the business admit, that five hundred dollars to the acre may be calculated on with certainty.

We most heartily wish success to the company, and we are pleased that the business of introducing into our country and rearing this species of the mulberry, has fallen into the hands of persons having both the ability and the inclination to give it a fair trial.

MEMORIAL

Of a committee of the citizens of Somerset county, asking a bounty on the domestic production of Silk.

To the General Assembly of Maryland.

At a meeting of citizens of Somerset county, assembled to consider the subject of the culture and manufacture of Silk, in Maryland, a committee, of which the undersigned is chairman, was appointed, to memorialize the Legislature of Maryland, on the subject of affording legislative encouragement to the production of silk in this State.

In proceeding to the discharge of the duty assigned them, the committee feel, in a great measure, relieved from the necessity of advertng, in detail, to the experiments which have already been made, and to the reasons upon which is founded the conclusions, that silk may become one of the most profitable employments of land, labor and capital, because they feel assured that the publications already made upon this interesting subject and the discussions and interchange of views, which have recently taken place in the National Silk Convention in Baltimore, and in the State Convention upon the same subject, in Annapolis, have already familiarised the General Assembly with what is known, and with what is anticipated, in reference to this important branch of industry, proposed to be introduced among us.

The committee believe that enough is known to warrant them in asserting that the soil and climate of Maryland are admirably adapted to the growth of the Mulberry, particularly of the species known by the name of *Morus Multicaulis*, (which has been found to afford the most abundant supply of nutritious food for the silk-worm,) and also that the climate is well suited to the rearing of the silk-worm itself. In these natural advantages of soil and climate, we have the principal agents in the production of silk. But besides these, capital is required to provide a supply of Mulberry trees, as well as to provide a Cocoonery and the requisite labor for the feeding of worms, and the proper machinery for the reeling and manufacture of silk. To these may be added, a knowledge of the natural history of the silk-worm, its proper treatment from the egg to the Cocoon, and skill in the reeling and manufacture of silk, as embracing all that is required towards its profitable production.

The preliminary inquiry then is, can silk, with the aid of these agents of production, be produced in Maryland, by domestic industry, as cheap as by the operations of commerce? For if we can grow or manufacture, and export any product, and in exchange for it, import into Maryland, and sell it cheaper, then, with proper legislative en-

couragement, there is good reason to believe we can, after a few years, produce it profitably here, (without the aid of a bounty) it is evident, that we would be encouraging a branch of production that cannot support itself, and prosecuting a losing business, by raising a production that would cost more than it would be worth. The bounty would in such case be a dead loss to the State, and a tax upon other branches of productive industry. But supposing the article of sewing-silk can be imported from abroad, and sold here for ten dollars per pound, and that its production here, by the employment of our land, labor and capital, including reasonable profits upon productive industry, would cost twelve dollars per pound, it is evident that the home producer must lose two dollars upon every pound of this production, and that the business could not be prosecuted without a bounty of two dollars per pound from the State. Suppose further that inexperience in the business, (as the want of skill and practice in reeling and throwing it into sewing silk, &c.) makes the cost four dollars per pound, more than it otherwise would be, and that the experience and practice of a few years, will enable the producer to afford a better article than the imported one, at eight dollars per pound, and that the business will then be a very profitable branch of productive industry; it is clear, that the State, by granting a temporary bounty of two dollars per pound, would not only cause to be introduced a very lucrative branch of industry, with all its collateral benefits, but would present to the people a better article, at a cost reduced *perpetuum*, by an amount equal to the bounty granted for a few years.

The above hypothesis is presented to illustrate the doctrine of the most enlightened modern writers on political economy, that 'it may be wise in a government to grant a premium on a particular product, which, though it make a loss in the outset, holds out a fair prospect of profit in a few years time.' It may be politic thus to do, because, continues Mr. Say, (from whose excellent work the above extract is taken) "a new channel of industry may ruin an unsupported speculator, though capable of yielding enormous profit, when the laborer shall have acquired practice, and the novelty has once been overcome." The committee present these views to satisfy if possible, the most sceptical, for it is presumed that no one who pretends to any knowledge upon the subject, doubts as to the silk business being ultimately profitable, even if it should be attended 'with loss in the outset.' But no anticipation of loss even in the outset, is indulged by those who are at all acquainted with the success, which has already attended the growth of silk, wherever its production has been attempted among us. In consequence of the peculiar nature of the production, it will abstract comparatively little from the land, labor, or capital, now profitably employed in other pursuits. At the present prices of raw silk, the profits upon the productive industry employed, far exceed those of any other agricultural pursuit. The demand will most likely be increased for many years, in a ratio to exceed the increased supply which competition will throw into the market. The great demand for American silk fabrics, on account of their superior texture and durability, over the flimsy imported fabrics, has already caused the erection of more factories in the Eastern States, than

can obtain a supply of raw silk sufficient to keep them in operation. Great Britain has to import all the raw silk used in her very numerous and extensive manufactories, and her demand will contribute to prevent any diminution of the present prices of that article.

The inquiry will naturally arise, "if these facts are so, why may not the citizens of Maryland be left to the promptings of self-interest, in view of these extraordinary profits, to influence them to engage in the production of silk?" This inquiry deserves a satisfactory reply, for it is unquestionably a general rule in political economy, "that every one is the best judge how to employ his industry and capital." But to this general rule, the committee have already shown that there may be exceptions; and in reference to the very article of silk, history shows, that in every country where its production or manufacture has become a subject of national importance and wealth, it has been introduced and fostered under the encouragement of the government. The Queen of China, in the earliest history of the culture of silk, is represented as affording in her own person, an example of industry in its production: "and France," (says the writer before quoted,) "at present contains the most beautiful manufactures of silk and woollen in the world, and is probably indebted for them to the wise encouragement of Colbert's administration. He advanced to the manufacturers two thousand francs for every loom at work." The reason why this encouragement is required, is found in the fact, that "every unusual application of the power of capital, is, at first, contemplated with distrust or disdain, so that partiality shown to a profitable mode of employing industry or capital may be productive of national advantage."

The mass of mankind are content to follow on in the "beaten track," trodden by their forefathers. It is well known how slowly and gradually, are introduced into general use, even great and important improvements in the mode of prosecuting any particular branch of industry, in which the people generally are already engaged. How much more slowly and reluctantly then will the people engage in an entire new and unusual branch of industry, with the *modus operandi* of which, they have no acquaintance, either by experience or observation; and the very simplicity of whose operations, as represented to them by others, begets incredulity in reference to its anticipated profit? But when the enterprise has once received the sanction of legislative wisdom, confidence in it will spring up in the minds of our citizens; they will engage in it, with alacrity, and all its golden promises will be amply redeemed.

There is another view of this subject, to which the committee would invite the particular and deliberate consideration of the General Assembly, as presenting the necessity of an immediate offer of a bounty on the production of silk, (if the General Assembly deem it important that this branch of industry shall be introduced among us,) in so striking a light, that the committee think it cannot be resisted. This view is presented in the fact that the citizens of Maryland are not left to engage in this enterprise with advantages like those enjoyed by the citizens of several of our sister States, and of course if they were to engage in it, their products could not come into equal competition, with the products of those States. In the

States where a liberal bounty on the domestic propuction of silk has already been offered, the profits on the productive industry employed, will be enhanced to the full extent of the bounty, beyond the profits in Maryland. The inevitable consequences which must result, and which must be deeply deplored by every citizen of Maryland, if this state of things is permitted to exist, will readily suggest themselves to the enlightened understanding of the General Assembly. If the General Assembly permit the present auspicious crisis to pass unimproved and our citizens shall not be enabled to enter the enterprize simultaneously with, or in quick succession after, the citizens of other States, the skill and experience, which they will acquire in advance of us, and the industry, which will be allured from our borders to find more profitable employment elsewhere, will leave Maryland far in the rear of the enlightened policy of the age, and cause the cheeks of her sons to tingle with the blush of shame.

The committee regret to learn that in the opinion of some, the condition of the State's finances precludes the expediency of granting the bounty contemplated by this memorial. The bounty is asked for only a few years, will be inconceivable in its aggregate amount, and always subject to a repeal by the legislature, if it should, contrary to all expectation, be found burthensome to the Treasury. The committee confidently believe that for every dollar paid as bounty on the product of silk, two dollars will be added to the aggregate wealth of the State, in the value of the article produced in consequence of the bounty.

The want of unanimity in the Councils of Maryland, in urging rapidly forward her system of internal improvements, a wavering, hesitating course, a morbid imagination, magnifying apparent difficulties into real obstacles, have contributed to cripple her energies and retard her progress in that march of improvement, in which some of her sister States have pressed onward, with a boldness and intrepidity, which command our admiration. Behold the genius of New York proudly seated on an eminence of prosperity, her magnificent internal improvements, the stupendous monuments of the wisdom and foresight of her statesmen, continually pouring golden treasures into her lap! Always among the foremost in the march of improvement, she has already offered a liberal bounty on the production of silk, that the stream of wealth, which flows from this branch of productive industry, may also contribute to her greatness. Similar means to those by which New York has attained her proud eminence, are within the reach of Maryland.

The committee, in conclusion, would respectfully submit the view herein presented, to the deliberate consideration of the General Assembly, in the hope that they will deem the granting of the bounty contemplated in this memorial, to be imperiously required by the most enlightened principles of political economy, and consequently, by the best interests of the State.

On behalf of the committee,

ISAAC D. JONES, Chairman.

A GOOD CROP OF MILLET.

Mr. Tucker—A few days since, Mr. A. Tinkelpaugh of Wayne county, called at the seed store with a quantity of very fine millet, and on mak-

ing some inquiries of him respecting this crop, he gave me the following account, which, as the result of an experiment, is worth recording, and may be interesting to some of your readers.

Mr. T. said he had seen in the agricultural papers some flattering accounts of the millet crop, and therefore determined to give it a trial. He selected for this purpose 2 acres of new land, such as is termed good corn ground, being a rich sandy loam. It was only ploughed once, and well harrowed. The seed was sown the 3d day of June, at the rate of 7 or 8 quarts to the acre, and harrowed in. The crop grew finely, and was cut on the 15th day of August. It was threshed by a machine and yielded 160 bushels of clean grain, or 80 bushels to the acre. The straw made excellent fodder for cattle, and was worth more than two acres of good grass hay. Mr. T. fed out most of the grain to hogs, and considers it worth as much for feeding as the same weight of corn or peas. It weighs about 50 lbs. to the bushel. When ground into meal and mixed with cooked vegetables, &c. it is a very superior food for fattening hogs. And on the whole, Mr. T. considers it a most valuable and certain crop.

Yours,

M. BATEMAN.

Rochester Seed Store, Feb. 20, 1839.

Gen. Farmer.

THE MORUS MULTICAULIS.

To the editors of the *National Intelligencer*.

BALTIMORE, APRIL 11, 1839.

GENTLEMEN: A letter appeared in the *National Intelligencer* of the 9th instant, headed "LETTER TO N. B. STODDART, Esq.," on the subject of the culture of silk in this country, which contains several statements deemed by me erroneous, and which I must ask permission to correct. The writer, "L. T.," objects to the *morus multicaulis*—first, because it was "imported from a climate so different from ours, which cannot stand the winter;" secondly, and "which, by the rapidity of its growth, shows the shortness of its life." To the first objection I have only to remark that the white mulberry itself is a native of China, and was imported into Italy and France from that country; so that the first objection to the *multicaulis* fails; for, if the *multicaulis* was imported from a country so different from ours, so was the white mulberry. But, reasoning from analogy aside, I know, from eleven years' possession of the *morus multicaulis*, that it is equally as hardy and just as capable of standing the winter as any other mulberry whatever, when planted upon its natural situation and soil. I have had it eleven winters, and have not yet lost a single bud from the effects of winter. A single tree was given to Dr. HOSACK by Dr. PASCALIS, in the spring of 1830; the latter gentleman planted it on his estate at Hyde Park, on the North river, on a high bluff 200 feet above the level of the river, and exposed to the northern blasts. That tree remains there still, never having lost a limb or a bud by winter. And, let me here remark, that the white mulberry itself is not found north of that locality, except in gardens, and not often there. I could mention hundreds of instances where the *morus multicaulis* has stood the winter unharmed, besides these cases, but it is deemed unnecessary.

The second objection, "the rapidity of its growth shows the shortness of its life," is the greatest

recommendation that can be given of the mulberry tree. It grows so rapidly that we can plant it this spring, and get a crop of silk from it this summer! Is this an objection to an American? Is not the speedy return of the proceeds of an investment the greatest recommendation that the investment of capital can have? And suppose the trees were all to die in ten years, (my old tree is now eleven years old, and no signs of dying yet,) the returns they will have made by the "rapidity of their growth" will have more than paid for replanting them. So that this second objection is disproved.

"L. T." next says that "the drought of some parts of Europe injures them exceedingly." The fact is directly the reverse in this country. During that most unparalleled drought of last summer, the *morus multicaulis* preserved its luxuriance more perfectly than any other tree, native or foreign. Indeed, the old trees were entirely unaffected by it, and none but the very young ones suffered at all, and even those not as much as the majority of our native trees. With us its very large leaves are not more easily spoiled than those of the common white mulberry. "L. T." also asserts that the *morus multicaulis* leaves "contain a less quantity of nourishing substances; the worms fed with them are often subject to many distempers," &c. The whole of this sentence is directly opposed to the truth. From the most careful experiments, it has been found that 80 pounds of *morus multicaulis* leaves contain as much nutritive matter as 100 pounds of the best of other varieties; that 80 pounds of the *morus multicaulis* will produce as much silk as 100 pounds of the best of any other kind; and that the worms are just as healthy on one kind as the other, disease being caused exclusively by mismanagement in some form or other. Let me quote another sentence from this writer; and that it may not escape the attention of the reader, let me make it the more conspicuous by placing it by itself *paragrapically*.

"Good God! have they not eagerly adopted all the improvements lately introduced in the culture of silk by Verri and Dandolo? Have they not lately preferred to the common white mulberry with which their ancestors used to feed the silkworms, the *Alpine morus*, which grows even in the most northern climates, and the *morus moretti* or *macrophylla*, which can be equally propagated both from seeds and from cuttings?"

If the reader has done reading this exquisite paragraph, I will just remark, that the people of France and Italy have not adopted all the improvements of Verri and Dandolo, and that these improvements are only adopted in a very few large establishments in either country, the mass of silkworms continuing in the old routine of their forefathers, in spite of Dandolo and all others. They have not preferred the *Alpine morus*, for they never saw it; it is an American production, raised, it is true, from the seed of the variety of white mulberry called the *moretti*; but it is American, both in growth and name, and never was seen or heard of in Europe. If particulars are desired, here they are. The *Alpine mulberry* was raised from seed of the *Moretti mulberry*, by Mr. Whitmarsh, of Northampton, Massachusetts. Out of many thousand trees thus raised from the par-

cel of seed, and numerous varieties, he selected a few of the best, and named them *THE ALPINE*; and this only two years ago. This name never was known in Europe until it was seen in American newspapers. Let me stop here to ask what can be thought of a writer who makes such blunders.

"L. T." also confounds the *morus moretti* and *macrophylla*, or considers these names as synonymous, which is another instance of his knowledge of the subject on which he writes. He also says the *moretti* equally propagates from seeds and cuttings. Now, I do know that the *moretti* is very difficult to raise from cuttings, and that it cannot be raised from seed at all! The *moretti* being itself but a *variety* of the white, the produce from seed are almost as various as their numbers. I saw some thousand raised from seed last summer, and the varieties were too numerous to count; the most of them were evidently the common white mulberry, and a few like what are called the *Alpine*.

I must conclude this by assuring "L. T." and A to Z, that the *morus multicaulis* will never be superseded in this country by either "*Alpine morus*," *morus moretti*, *macrophylla*, *Dandolo*, *alala*, *Calabrian*, or any other. It has been fully tried, and found superior to all other kinds in all the valuable requisites for the silk culture in this country. Respectfully, yours,

GIDEON B. SMITH.

From the Magazine of Horticulture.

Notes on a novel method of preventing Mildew in the open air culture of foreign Grapes—

By A. J. Downing, Botanic Garden and Nurseries, Newburg, N. Y.

There are many situations, especially in the neighborhood of cities, from Philadelphia, as far north as the forty-second degree of latitude, where the more hardy and prolific varieties of the foreign grape may be cultivated with considerable success in the open air. Indeed, the only obstacle to general success in their culture out of doors, in the Middle States, is their extreme liability to attack by mildew of the young fruit, when the latter are just swelling, or have nearly attained the size of large peas. The mildew that then fixes upon them appears to indurate the skin of the young grapes, prevent their swelling to their proper size, and, in short, it generally unfits them for eating or any other purpose.

Various methods have been suggested, by different persons, for the prevention of this mildew or blight, which have been tried with more or less success. Some have recommended us to train the vines high, so as to be out of the reach of the damp ungenial vapors of the moist earth; others, to keep them low and well furnished with a fresh supply of young wood. Another remedy, which appears to have found much favor, consists in sprinkling the bunches while the grapes are very young, with a solution of flour of sulphur, which, it is asserted, will, in most cases, prevent the attack of the foul parasite.

We have no remarks, at present, to offer your readers upon the relative benefits to be derived from any of these modes. We simply wish to place before them another, and, as it appears to us, a very successful mode of treating the foreign grape in the open air, so as to have an abundance

of fine fruit perfectly free from mildew every year.

A person about four miles distant, who rears a considerable quantity of Sweet Water, Chasselas, and other foreign grapes, for market, and who was formerly much troubled with the attacks of the mildew, was, some two or three years since, while reflecting on the subject, struck with the fact, that, with him, young vines, when they first came into bearing, generally produced good and unblemished crops for the first one or two seasons. After this, becoming comparatively feeble, the mildew began to appear, and gradually grew worse every following season.

Reflecting upon this suggestion, thrown out by nature in the above instance, it occurred to him, that if he could always keep his vine young and thrifty, or by some means provide himself with a succession of such vines, he might place the mildew, in a great measure, at defiance.

This he has been able to effect in the following way, the results being highly satisfactory. In the month of June, every year, he selects, on every vine, a clean shoot, (left the previous summer for that purpose,) some five to eight feet in length, which he buries in the earth, about 18 inches of its middle part, in the common method of *layering*. The plants in his little vineyard are planted in rows, and the layers being made in the line of the rows, between the old plants, when they are rooted, which they are the next year, they are tied up to a stake to receive a partial training—The next, or second season, all the old plants are dug up and thrown away, if they are not perfectly strong and vigorous. In this way he preserves a constant stock of strong new vines, which are able, by their superior vigor, to resist the attacks of the mildew, and which, as we can testify, bear beautiful and abundant crops of fruit, free from mildew.

Those of your readers, who grow foreign grapes, are recommended to put in practice this method of culture, which is really attended with a trifling degree of trouble. The success which attends this method of constantly renewing the vines would appear to lead to the conclusion, that in a cold and comparatively ungenial climate like ours, the foreign grape, however well covered in winter, soon becomes too much enfeebled to produce fair and unblemished fruit. In the southern parts of the other continent, its duration, and, to a considerable degree, its fruitfulness, extends to upwards of half a century. A. J. D.

Botanic Garden and Nurseries, Feb. 1839.

From the same.

On the cultivation of Brussels Sprouts—by J. W. Russell.

The Brussels Sprouts are highly prized throughout Europe, as a delicate culinary vegetable—therefore it is grown as extensively as any of the brassica or cabbage tribe. The appearance of the plants is more like the Savoy cabbage than any other variety, with this difference,—the stems grow to the height of three or four feet, and are closely set, from the bottom to the top, with sprouts like small cabbages in miniature; each being from an inch to two inches in diameter.

The plants are raised from seed sown in April or May, an ounce of which, if good, will be sufficient to sow a bed four feet wide by ten in length.

If the seed is sown in April, (which would be the best method,) on a slight *hot-bed*, under glass, the plants will be ready for the final transplanting by the second or third week in May. Select a piece of ground for this purpose, that is in good heart, and where the soil is deep. The plants need not be set out more than eighteen inches apart *each way*, as the head does not spread like a Savoy, and the leaves drop off before the sprouts are ready for gathering, which will be by the first of October. The tops or heads ought to be cut off *two or three weeks* before the sprouts are gathered for use.

The whole treatment, as to the cultivation and management, is precisely the same as the Savoy cabbage. In November, or before the ground freezes hard, the plants might be taken up, and planted in earth in a cellar, pretty close together, and would be found to be an excellent vegetable through the winter. J. W. RUSSELL.

Mount Auburn, Cambridge, March 8, 1839.

CLARIFYING BEET SUGAR.

In answer to an inquiry respecting the most approved method of clarifying sugar from the beet, we have to observe, that the latest improvement in the manufacture of this article, is to slice and dry the root, after which it is ground, or reduced to a coarse powder—water being filtered through it, the saccharine matter is readily dissolved, leaving behind the coloring matter and vegetable extract, combined with the fibrous part of the root. The extract, or solution of saccharine, which is thus obtained, is nearly as the sap from the maple, and when reduced to a syrup may be clarified with as little difficulty, and in the same manner as maple syrup.

[From the Southern Agriculturist.]

CULTIVATION OF THE SWEET POTATO.

St. John's, Berkley, March, 1839.

Mr. Editor—The following letter, written by Mr. Solomon Clark, of St. Stephen's, in reply to one written him by a friend, appears to me so full of valuable information, that I request the favor of its publication in your journal. Mr. C. is well known as a most successful and thriving agriculturist, and is authority on the subject of potatoes, for they are usually a drug with him. He does not state the character of his soil—I happen to know that it is a good specimen of pine land—a character of soil held at present in little repute, but which I would not be surprised to see soon very highly appreciated. Mr. C. further inculcates the planting of potatoes in March. I have so often heard successful planters dogmatize on the relative advantages of early and late planting, that I have arrived to the conclusion that, with reasonable limits, both parties are right.

Trusting that the hints contained in this paper may yet be valuable, even for the present year, I submit it you—and am, sir, yours, &c.

A SUBSCRIBER.

Rock Hall, St Stephen's, Feb. 1839.

Dear Sir—***** As to my method of raising potatoes, I would prefer telling you in conversation to communicating by letter, as there are many little points which may escape me in writing, to which you would naturally call my attention in conversation.

In the first place, plant your potatoes by the middle of March, in last year's cotton field, if practicable; put under the list from twenty to twenty-five bushels of cotton seed to the acre. Make your bed small, and enlarge it while planting and hoeing. Your potatoes should not be planted more than from three to four inches apart. The long potatoes should be cut, the smaller should be planted whole.

After the potatoes are set, cover them by drawing up the earth on one side of the bed; clap the earth well with the hoe, then draw up the earth on the other side, and leave it loose, giving to the bed a sharp top.

When you see the potatoes coming up, send a careful hand to remove all the earth from the top of the bed, as far down as the part which was clapped. If a few plants are cut in this operation, no harm will be done. If this work be well done, you will be spared the trouble of picking them.

Before your field becomes grassy, one hand can draw down with the hoe a task and a half, (three-quarters of an acre.)* Let the hoe go as close to the plant as possible. Let the field remain thus drawn down from seven to ten days, and then with a shovel-plough run one (or if the beds be far apart, more than one) deep furrow. Follow the plough with the hoe while the earth is yet loose, and draw up a large bed. During this work pay no attention to the vines, as it is of no consequence whether they are covered or not. If in drawing down the earth the beds have been well cut, there will be no necessity to pick away weeds or grass. Your beds ought ever to be well covered with vines. Now the work must depend upon circumstances. Your crop must be kept clean, but the earth on the beds ought not to be stirred.

SOLOMON CLARK.

* Would it not be as well, Mr. Editor, whenever a quantity of land is to be expressed in a paper intended for publication, to use the term "acre" and in its constituent parts, rather than the vague and indeterminate "tasks?" The former is known and understood wherever your journal circulates—the latter is entirely local in its application, and its value varies with the locality. In the southern and south-western parts of the State, the acre is divided into four "tasks" of 105 feet square each, two of these, or half an acre, being the day's work of a full hand. In the cotton region of this section, the "task" is a portion of land 150 feet square, or as nearly as possible half an acre. Here we have the same word used to express a half acre and a quarter of an acre. How easy is it to express the intended quantity in terms which call for no explanation, and admits of no misconception.

GRAIN AND GRASS.

We extract the following from an article in the Boston Cultivator. If the assertion be true, that grass does not exhaust the soil, (and we are inclined to think there is some truth in it,) it furnishes a strong reason why ground should be kept up in tillage but barely enough to rot the turf, before it is put down in grass. There is no doubt but tough hoeing, or something else, induces many to keep up their lands too long; and thus, while they think they are recruiting them, are all the while exhausting them.—*Cheshire Farmer*.

The raising of grain requires a soil by nature rich, or made so by culture. In a populous country are created the means of enriching the soil, and these means supply the exhausted fields with

the necessary pabulum, or food of future plants. This is nature's rotation, and nature's laws must be obeyed. If we will maintain our population on the luxury, grain, with the product of grain we must restore an exhausted soil. Grain is the great exhauster, and we could readily render our lands fertile again, if we were not obliged to crop them with grain. Grass grows spontaneously, and does not exhaust our soil. You will dispute and controvert our doctrines until you have well considered the subject, and then ninety-nine of you in a hundred will agree with us. When your lands have been mown seven years without manuring, you obtain a larger crop of corn or grain on ploughing up than if you had mown them but four. What is the reason of this? You get as large a crop because your grass is not an exhauster—you get a large crop, because in seven years the soil becomes filled with grass roots, to be decomposed as soon as you kill them with the plough. In seven years your grass land is hide-bound, and choaked with abundance of roots. It will not give you half a crop of grass, but it is not because your land has been growing poorer grass; for if you plough and lay immediately to grass again, you will in most cases double your grass crops. Please to consider this doctrine well, and when you have expressed your assent, we will urge you a step farther. As it is now winter, we may as well stop, and think a little upon it till we meet again. We wish to put you in a way to double the profits of your grass lands without injuring your other crops. This is a matter we have much at heart. If you can double your quantity of hay, you can keep double your present number of cattle. We think it possible to do this without the aid of lime.

If you have as many cattle as you wish to keep, why sell off half your land, and let us double the number of farmers as well as that of stock.

[From the Zanesville Gazette.]

MR. S. HOWARD—*Sir*: Having some experience in making Thorn Fence, and being acquainted with the experience of others on the subject, I am urged to communicate what little information I have. The seed of the white thorn found on alluvial soils, seem to answer as well as the English thorn. Keep them dry and from the air (as one would potatoes) till the middle or latter end of March. About the middle of March, if the ground be in a suitable state, they may be sowed, and covered with a reasonable quantity of soil or ashes. If the ground and weather be not in a fit state, they may be mixed with compost earth and ashes, or old stable manure, and kept ready for sowing as soon as the ground becomes fit. The young plants may be set out in twelve months after. But perhaps a more eligible method would be to turn up two furrows late in the fall where the fence is intended to be, and in March following sow the thorn seed on the prepared ground where it is intended to grow. If they come up too thickly they can be easily weeded out; and they should be kept disencumbered of weeds till they become predominant.

If vacancies should occur, by accident or the death of some plants, it may be well to fill them up with Black Locusts of Privet. It is not good

to plant Peach in your fence, because on the death of the Peach a vacancy will be left, and it will be difficult to fill it up by new plants, as they will remain sickly and overpowered by the surrounding encumbrance.

Black Locusts may be germinated thus: Sow the seed at the time you sow your thorn, but in a separate place. Cover them well, and make a bush-heap on them. Burn the bush-heap as soon as convenient, and the seed will vegetate. An experiment might be made thus: Mix the seed with rich moist earth, bury them in a box in a hot dunghill from the 20th of March till the 1st of April. On disentering them sow them out.

I am yours, &c.

J. H.

MR. ESPY'S THEORY ON THE PRODUCTION OF RAIN.

As many have amused themselves at the expense of this gentleman's theory, and the subject is one of interest, we give below his views on the subject, leaving the reader to judge for himself of the practicability of the plan, not affecting ourselves to be able to judge of its merits. But we feel it due to Mr. Espy to state, that he possesses a very elevated character, both for moral and scientific attainments:

[From the National Gazette.]

Messrs. Editors: Knowing the difficulty, if not the impossibility, of making the subject intelligible in a short newspaper article, it is with reluctance that I am now induced, after much earnest solicitation from my friends, both near and remote, to give a very brief summary of the reasons and facts, which have led me to desire that an experiment should be made, to see whether rain may be produced artificially in time of drought.

The documents which I have collected on this subject, if they do not prove that the experiment will succeed, do at least prove that it ought to be tried; this I trust will most satisfactorily appear when they shall be published entire. In the meantime it has become necessary to present to the public something on the subject, lest longer silence might be construed into an abandonment of the project.

First—It is known by experiment, that if air should be expanded into double the volume by diminished pressure, it would be cooled about 90 degrees of Fahrenheit.

Second—I have shown by experiment that if air at the common dew point in summer season in time of drought, 71 degrees, should go up in a column to a height sufficient to expand it, by diminished pressure into double the volume, it would condense into water or visible cloud, by the cold of expansion, more than one-half of its vapour—a quantity sufficient to produce nearly three inches of rain.

Third—It is known by chemical principles, that the caloric of elasticity given out during the condensation of this vapour, would be equal to about 30,000 tons of anthracite coal burnt on each square mile over which the cloud extended.

Fourth—I have shown by experiment [see Saturday Courier, March 18, 1837] that this caloric of elasticity would prevent the air from cooling only about half as much as it would if it had no vapour in it, or about 45 degrees at the height

assumed, which would cause the air in the cloud to be, at that height, about 45 degrees warmer than the air on the outside of the cloud at the same height. I have shown from these principles [see Journal of the Franklin Institute for 1836] that the barometer would fall under the cloud thus formed, in favorable circumstances, a quantity as great as it is known to fall sometimes under the middle of a dense and lofty cloud, and that consequently the air would rush in on all sides towards the centre of the cloud and upwards in the middle, and thus continue the condensation of the vapour and the formation of cloud and the generation of rain. [See also Journal of the Franklin Institute, for September and October, 1838, and for January, February, and March, and subsequent, 1839.]

Fifth—I have shown also in the volumes quoted above, that the air does move inwards on all sides towards the centre of the space or region where a great rain is falling, and of course upwards after it comes in under the cloud, which is so much lighter than the surrounding air; at least, that it does so in all storms which have been investigated, which now amount to sixteen, besides several tornadoes, in all of which the trees were thrown with their tops inwards.

From the principles here established by experiment, and afterwards confirmed by observation, it follows, that if a large body of air is made to ascend in a column, a large cloud will be generated, and that the cloud will contain in itself a self-sustaining power, which may move from the place over which it was formed, and cause the air over which it passes to rise up into it, and thus form more cloud and rain, until the rain may become general: for many storms which commence in the West Indies very narrow, are known to move from the place of beginning several thousand miles, widening out and increasing in size, until they become many hundred miles wide. [See Bedford and Read, and the Reports of Joint Committee.]

If these principles are just, it will follow, when the air is in a favorable state, that the bursting out of a volcano ought to produce rain; and such is known to be the fact, and I have abundant documents in my possession to prove it.

So, under very favorable circumstances, the bursting out of great fires ought to produce rain; and I have many facts in my possession rendering it highly probable, if not certain, that great rains have sometimes been produced by great fires.

It is a general opinion in parts of the country where great fires frequently take place, that those fires produce rain. Now this opinion could hardly have originated without some circumstances besides mere coincidence attending them, such as is related in the following account. Mr. Dobrezhoffer, a missionary to Paraguay, speaking of the tall grass and bulrushes on fire, says:—"I myself have seen clouds and lightning produced from the smoke, as it is flying off like a whirlwind; so that the Indians are not to blame for setting fire to the plains in order to produce rain, they having learnt that the thicker smoke turns into clouds which pours forth water."—(Account of the Abipones, vol. 3d, page 150.)

Mr. Lapice, of Louisiana, informs Dr. S. Calhoun, of this city, "that the conflagration of the long grass in the prairies of that State, covers eve-

ry thing with its cinders for miles around, and that rains follow shortly, according to immemorial observation in that country."

"Very extensive fires in Nova Scotia, in the woods, are so generally followed by heavy floods of rain, that there is some reason to believe that the enormous pillars of smoke have some share in producing them."—(Mag. Nat. Hist. for December, 1835.)

The bad philosophy of supposing that smoke was turned into cloud and produced rain, does not weaken the evidence of the main fact.

If the principle is correct, that clouds are formed by up moving columns of air, we should expect to find, in favorable states of the air, that clouds would form over large cities and manufacturing towns, where much fuel is burnt—and so we find it to be.

Extract of a letter to me, from Benj. Matthias, of Philadelphia—"In the course of last winter, while in England, I visited Manchester four or five times, and on each day it rained. Several of the inhabitants assured me that it rains in Manchester more or less every day in the year."

Extract from Edward Mammatt's Collection of Facts concerning Ashby Coal Field—4to, London, 1836:

"When the air is apparently stagnant in the valley of the Thames and surrounding country, a strong current is found to set in on every side of London, along the streets leading from the country, in the morning. This current is no doubt occasioned by the rarefaction in the high chimneys over so many thousand fires just kindled, and must be the cause of the introduction of fresh air to an immense extent, which would not otherwise flow. This rarefaction produces other phenomena, among which, when the atmosphere is in a light state, and clouds are passing at a height which does not allow them to condense and fall in rain, these accumulate in passing over London, and either remain as a dense fog, or drop in small rain all day long, scarcely clearing once; the country at a little distance having very little rain."

The bad philosophy of supposing the air so light on these occasions as to let the clouds on passing sink down in it over London, does not invalidate the evidence of the principal fact.

From these remarkable facts alone, I think it will be acknowledged, that there is some connection between great fires and rains other than mere coincidence, even if that connection remained a mystery. Humboldt acknowledged this in the case of volcanoes, when he speaks of the mysterious connection between volcanoes and rain, and says that when a volcano bursts out in South America in a dry season, it sometimes changes into a rainy one. But now, when it is demonstrated by the most decisive evidence, the evidence of experiment, that air in ascending into the atmosphere in a column, as it must do over a great fire, will cool by diminished pressure so much that it will begin to condense its vapour into cloud as soon as it shall rise about as many hundred yards as the temperature of the air is above the dew-point in degrees of Fahrenheit, it amounts to a very high probability that great fires have sometimes produced rain. That great fires, and even volcanoes, should not always produce rain, is manifest from the circumstance that as they break

out accidentally, they may sometimes occur when the state of the atmosphere is unfavorable, and even adverse to rain. First, if they should break out when there is a current of air either near the surface of the earth, or at a considerable distance above, of some strength, the up-moving column would be swept by it out of the perpendicular, before a cloud of great density could be formed, and thus rain would be prevented.

Second, they might break out when the dew-point was too low to produce rain at all; and, third, there may sometimes be an upper stratum of air, containing so much caloric, that its specific levity would prevent the up-moving column from rising into it far enough to cause rain.

These three things I conceive are the only circumstances which prevent great fires from producing rain at all times when they occur. The first two can be ascertained without much difficulty, by means of small balloons and the dew-point; the last, in the present state of science, cannot always be known, and a failure on that account must be risked by the experimenter. This risk I am willing to run, if Congress or the State Legislature will promise a sufficient reward in case of success.

It has been objected to my project that I propose too much, and that it is utterly absurd to expect to make rain in time of drought, when there is such a scarcity of vapour in the air.

Now this objection is founded on an entire ignorance of the fact, arising from a want of due consideration. For there is generally more vapour in the time of summer drought than at any other time, as I know by experiments constantly made almost every day for the last ten years; and this is reasonable in itself, for the vapour is rising into the air and increasing every day of dry weather, preparing for another rain. A quiet state of the atmosphere is also more likely to occur, to great heights, in time of droughts than at any other time, for immediately after rains there are sure to be cross currents of air, produced by the inward motion of the air at the lower part of the cloud and an outward motion in the upper part, which require some time after the rain to come to rest.

If I have succeeded in showing that there is any, the least ground to hope that an attempt to produce rain, might sometimes succeed under favorable circumstances, and that those favorable circumstances are more likely to occur in time of drought than at any other time, then it follows that the experiment is a highly interesting one, and ought to be immediately tried. If it should be successful, who can tell the mighty results which may follow in its train.

I have many reasons and facts which induce me to believe that if a very large cloud is once generated, the rain will become general, or at least spread over a wide extent of territory; and who can tell, *a priori*, that this will not be the case, when it is now known that an immense steam power is let loose in the formation of such a cloud—a power which can be calculated with as much accuracy as that of the steam engine itself, and in part on the same principles.

Gentlemen have made their puns on this project, and had their laugh; and I am sorry to see by letters which I have received, that my friends and relations at a distance are much troubled at

the innocent laughs; but let them be consoled, I have laughed too, well knowing that those who laughed the most heartily would be the most willing to encourage the experiment, as soon as they discovered they had nothing to laugh at. As a proof that I was right in this anticipation, I may be permitted to say, that I have lately received a letter from a highly esteemed member of the American Legislature, who laughed as heartily as any one when my petition was presented there, containing many kind expressions, and promising me by way of amends for his levity, "to avail himself of the earliest opportunity of being better informed on the subject of my new philosophy." Such conduct as this is all I want; I fear not the strictest scrutiny.

If I should be encouraged to go on with the experiment, I mean to have a large mass of combustibles prepared ready for use, and when I have found all the circumstances mentioned before, favorable in a time of drought, I would set fire to the circumference in several places at once. Soon after the fire commences I will expect to see clouds begin to form, about as many hundred yards high as the temperature of the air is above the dew-point in degrees of Fahrenheit. I will expect to see this cloud rapidly increase in size, if its top is not swept off by a current of air at a considerable distance above the earth, until it becomes so lofty as to rain. I shall expect the cloud to move eastwardly, increasing in width as it advances, and the next day I shall expect the region to the south of where the rain fell, to be visited by rain, for a reason explained in my writings.

But it is in vain to anticipate all the results which will follow, for nothing but the experiment itself can demonstrate them. If the experiments when repeatedly tried should fail, it would be in vain for me to say I would not be mortified—but I will not incur any disgrace, unless it is disgraceful to desire to see a great experiment made, which all the knowledge we have on the subject, in the present state of science, leads us to hope will be crowned with success.

I have made this very brief, though necessarily imperfect statement of my reasons, for wishing to see the experiment tried, which can alone decide the question, to comply with earnest and repeated solicitations of my friends. I will now, in conclusion, say something for myself.

The present state of the science of Meteorology renders it highly important to know in what direction and with what velocity summer rains travel over the surface of the earth. What is their shape, round or oblong; and if oblong, in what direction their transverse diameter lies, and whether they move side foremost, or end foremost, or obliquely. Now I request gentlemen throughout the United States who feel interested in this subject, to keep a journal of all rains, from the beginning of June till the end of September; noting their beginnings and endings, the force and direction of the wind, and also of the clouds, and send the accounts (published in some paper) as early in October as convenient, to William Hamilton, Esq. Actuary of the Franklin Institute, Philadelphia.

Finally, if any gentleman intends to clear from twenty to fifty acres of woodland this spring, or early in the summer, in the western or north-

western parts of Pennsylvania, will he please to inform me of the fact as soon as convenient.

Journals of the weather also for the 16th, 17th, and 18th of March, 1838, kept in various parts of Virginia and North Carolina, are much desired; and if gentlemen can even tell me how the trees are thrown down, indicating the direction of the wind, the information will be highly valuable, and should not be withheld if nothing is known or recollected.

I am, gentlemen, yours respectfully,

JAMES P. ESPY.

Philadelphia, April 2, 1839.

MULBERRY TREES, &c.



WM. PRINCE & SON still have the following Trees for sale: 35,000 genuine *Morus Multicaulis* Trees, from 1 to 6 feet high, which will be sold either trimmed or untrimmed, or in battings; the wood of these trees is perfectly mature, and they have been well preserved from all injury.

42,000 genuine ALPINE TREES, of a very superior character, at least equal to any in the Union.

10,000 of the splendid *MORUS EXPANSA*, 5 to 9 feet high, and much branched, remarkable for its great excellence in every respect. This is the only large parcel of this tree existing in this country.

75,000 Canton, Brussa, *Morus Elata*, Rose of Lombardy, Roman, Pyramidalis, Oriental, white Italian and other kinds, all of which will be sold at prices deemed moderate. Also a large assortment of the silk worms Eggs of the most choice and valuable kinds.

Ample directions for the culture and successful propagation of all kinds of Mulberry Trees will be given to every purchaser.

Flushing, near New York, April 17, 1839.

ap 23

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TWO DURHAM BULLS.

For sale, an IMPORTED short-horn Durham bull, rising 2 years old, of fine size and form, a strawberry roan—price \$500.

ALSO—another bull of the same breed called RODE-RICK; he is 2 years old, is out of White Rose; she by the imported short-horn (improved) Durham bull Gloucester. For Gloucester's pedigree see British herd-book. Roderick is a pure white, out of Virginia, an imported cow, raised by Mr. Curwen of England. Price \$300.

The pedigrees are both unexceptionable.

ap 23 3t

E. P. ROBERTS.

CHINESE MULBERRY TREES.

American Silk Agency, No. 95, Walnut st. Philadelphia

The subscriber having opened a permanent Agency for the purchase and sale of all articles connected with the culture and manufacture of Silk in the United States, offers for sale all the different varieties of MULBERRY TREES, suitable for raising the SILK WORM; viz: *Morus Multicaulis* Alpinese, Brussa *Multicaulis* Seedlings, *Morus Expansa*, *Multicaulis* Cuttings, Improved Italian Trees, &c. Also, Cuttings from Norton's Virginia Seedlings, and Cunningham's Prince Edward GRAPE VINES. These vines produce an abundant crop of fruit, warranted not to rot or mildew and are fine for the table, and capable of yielding the finest wines.

S. C. CLEVELAND, Agent.

SILK AGENCY,

Corner of E. and 7th streets, Washington City, D. C.

The subscriber having commenced an Agency for the purchase and sale of SILK MULBERRY TREES, and all articles connected with the growing of Silk, offers for sale the following varieties of Mulberry Trees at Baltimore prices, viz: *Multicaulis*, Alpinese, Brussa, White Italian and Canton; also Mammoth White Silk Worm's Eggs, warranted to be of superior quality. All the recent publications on silk growing for sale, and subscriptions received for the various periodicals devoted to that subject.

no 20

J. F. CALLAN

Printing, executed at the Farmer & Gardener office, at short notice.

AGRICULTURAL IMPLEMENTS.

THE Subscriber acknowledges with gratitude the liberal patronage he has received from the public since the establishment of his Repository in 1825.—During this long period he has studied successfully his own interest by identifying them with the interest of his customers in being prompt and faithful in the execution of their orders.

His present facilities of manufacturing agricultural implements, are not surpassed by any other establishment in this country, he can therefore afford them on as reasonable terms as any other person for the same quality of work. His present stock of implements are extensive both in quality and variety, to which he would invite the attention of those who wish to purchase.

A liberal discount will be made to all cash purchasers, and to those who purchase to sell again.

The following names are some of his leading articles viz His *PATENT CYLINDRICAL STRAW CUTTERS*, wood and iron frames, but all with his patent double eccentric feeders, with or without extra Knives, prices varying from \$33 to \$110, subject to cash discount, he challenges the world to produce a better machine for cutting long forage, Myer's *WHEAT FAN* and *ELLIOTT'S PATENT HORIZONTAL WHEAT FANS*, both a very superior article. Fox & Borland's *PATENT THRESHING MACHINES* and Martineau's *PATENT HORSE POWERS*, also superior articles.—A great variety of *PLOUGHS*, wrought and cast Shares, of all sizes and prices; Gideon Davis's improved *PLOUGHS*, of Davis's own make of Patterns, which are sufficiently known to the public not to require commendation; 100 *CORN CULTIVATORS*, also expanding *CULTIVATORS*, both iron and wood frames, and new plan; *TOBACCO CULTIVATORS*.

F. H. Smith's *PATENT LIME SPREADERS*, the utility of which has been made known to the public; together with a general assortment of *FARMING IMPLEMENTS*; *PLOUGH CASTINGS* of every description and superior quality kept constantly on hand at retail or by the ton; also, *MACHINE* and other *CASTINGS* furnished at short notice and on reasonable terms, his iron Foundry being furnished with the best materials and experienced workmen with ample machinery running by steam power for turning and fitting up machinery.

ALSO—Constantly on hand D. Landreth's superior *GARDEN SEEDS*;—In store *POTATOES* and common *SEED OATS*, *TIMOTHY* and *HERDS SEEDS* all of superior quality.—All orders will be promptly attended to.

JONATHAN S. EASTMAN,

Farmers' Repository, Pratt street,
Near the Baltimore & Ohio Rail Road Depot.

AGRICULTURAL IMPLEMENTS.

John T. Durning & Co. encouraged by the favors shown them in the past year, are determined to offer no article to their friends but such as they can warrant, made of the very best materials, finished in a superior manner, of the newest patterns, and at liberal prices.

From John T. D.'s long experience in the manufacture of these articles he flatters himself that he can give entire satisfaction to those farmers, Commission Merchants, Captains and others who may favor him with their orders.

J. T. D. & Co. wish especially to recommend a lately improved and superior "Wheat Fan" as being admirably adapted to clean effectually and fast—price \$25. They invite the attention of the public to their stock of Castings for ploughs or machinery, by the lb. or ton at the lowest prices. Also on sale, New York ploughs, No. 10 1-4 at \$3, No. 11 1-4 at \$3 25, No. 12 1-4 at \$3 75. Repairs in general done with neatness and despatch.—any new machine coming into market may be obtained to order.

All orders for field and garden seeds, of the best kinds and fresh, will also be furnished at our Agricultural Establishment, upon the usual terms, by Thomas Denny, seedsman, Grant St. Baltimore, rear of Messrs. Dinsmore & Kyle.

fe 26

A HERDSMAN WANTED.

An experienced herdsman who knows his business thoroughly, who is acquainted with the diseases and management of cattle, and who is sober and industrious, will obtain a good place and wages by applying to Geo. Beltz, hoover, Fountain Inn, Baltimore, or to WM. GOLL,

Near the first gate on the Frederick turnpike road,
april 9 3t

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every Morn.

	PER	FROM	TO
BEANS, white field,.....	bushel.	1 75	
CATTLE, on the hoof,	100lbs	12 00	12 50
CORN, yellow.....	bushel	86	87
White.....	"	85	86
COTTON, Virginia,.....	pound	14	15 1/2
North Carolina,.....	"	13 1/2	15
Upland,.....	"	14 1/2	15
Louisiana—Alabama	"	15	16 1/2
FEATHERS,.....	pound.	53	55
FLAXSEED,.....	bushel.	1 60	1 65
FLOUR & MEAL—Best wh. wh't fam.	barrel.		
Do. do. baker's.....	"		
SuperHow. st. from stores	"	7 25	
" " wagon price,	"	7 00	
City Mills, super.....	"	7 50	
" extra.....	"		
Susquehanna,.....	"	7 37	
Rye,.....	"	5 50	
Kiln-dried Meal, in hlds.	hbl.	18 50	
do. in bbls.	bbl.	4 37	
GRASS SEEDS, wholes. red Clover,	bushel.	12 50	13 00
Kentucky blue.....	"		
Timothy (herds of the north)	"	2 75	3 00
Orchard,.....	"	2 00	2 50
Tall meadow Oat,.....	"		3 00
Herds, or red top,.....	"		1 00
HAY, in bulk,.....	ton.	17 00	19 00
HEMP, country, dew rotted,.....	pound.	6	7
" water rotted,.....	"	7	
HOGS, on the hoof,.....	100lb.		9 50
Slaughtered,.....	"		
HOPS—first sort,.....	pound.	20	
second,.....	"	18	
refuse,.....	"		
LIME,.....	bushel.	32	33
MUSTARD SEED, Domestic,—; blk.	"	3 50	4 00
OATS,.....	"	48	50
PEAS, red eye,.....	bushel.	1 40	
Black eye,.....	"	1 40	
Lady,.....	"	1 40	
PLASTER PARIS, in the stone, cargo,	ton.	3 25	3 50
Ground,.....	barrel.	1 37	1 50
PALMA CHRISTA BEAN,.....	bushel.		
RAGS,.....	pound.	3	4
RYE,.....	bushel.	90	1 00
Susquehanna,.....	"		none
TOBACCO, crop, common,.....	100lbs	5 00	5 50
" brown and red,....	"	6 00	6 50
" fine red,.....	"	9 00	12 00
" wrappery, suitable	"		
for segars,.....	"	10 00	20 00
" yellow and red,....	"	10 00	14 00
" good yellow,.....	"	10 00	15 00
" fine yellow,.....	"	12 00	15 00
Seconds, as in quality, ..	"	6 00	10 00
" ground leaf, ...	"	7 00	13 00
Virginia,.....	"	6 00	10 00
Rappahannock,.....	"		
Kentucky,.....	"	6 00	8 00
WHEAT, white,.....	bushel.		
Red, best.....	"	1 60	1 63
Maryland.....	"		
WHISKEY, 1st pf. in bbls.....	gallon.		39 1/2
" in hlds.....	"		38 1/2
" wagon price,.....	"		
WAGON FREIGHTS, to Pittsburgh,	100lbs	2 25	2 50
To Wheeling,.....	"	2 75	
WOOL, Prime & Saxon Fleeces,...	pound.	50 to 55	
Full Merino,.....	"	45 50	
Three fourths Merino,.....	"	40 45	
One half do.....	"	35 40	
Common & one fourth Meri.	"	35 40	
Pulled,.....	"	30 33	
POTATOES, 60 to 85 cts. a bushel.			

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,.....	barrel.		
BACON, ham new, Balt. cured....	pound.	13 1/2	14
S. ilders,.... do.....	"	11	12
Widdings,.... do.....	"	12	
Assorted, country,.....	"	10	11
BUTTER, printed, in lbs. & half lbs.	"	31	50
Roll,.....	"	25	31 1/2
CIDER,.....	barrel.	1 75	2 00
CALVES, three to six weeks old....	each.	5 00	6 00
Cows, new milch,.....	"	30 00	40 00
Dry,.....	"		
CORN MEAL, for family use,.....	100lbs.	2 00	2 12 1/2
CHOP RYE,.....	"		1 60
EGGS,.....	dozen.	25	
FISH, Shad, No. 1, Susquehanna,	barrel.		
No. 2,.....	"		
Herrings, salted, No. 1,.....	"	6 00	6 25
Mackerel, No. 1, ————No. 2	"	12 00	15 00
No. 3,.....	"	7 75	
Cod, salted,.....	cwt.	3 25	3 37
LARD,.....	pound.	12	13

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

U. S. Bank,.....par	VIRGINIA.	
Branch at Baltimore,.....do	Farmers Bank of Virg.	1
Other Branches,.....do	Bank of Virginia,.....	do
MARYLAND.	Branch at Fredericksburg,.....	1 1/2
Banks in Baltimore,.....par	Petersburg,.....	1/2
Hagerstown,.....o	Norfolk,.....	do
Frederick,.....do	Winchester,.....	1
Westminster,.....do	Lynchburg,.....	1
Farmers' Bank of Mary'd, do	Danville,.....	1
Do. payable at Easton,.....do	Bank of Valley, Winch.	1-2
Salisbury,.... 1 per ct. dis.	Branch at Romney,...	1-2
Cumberland,.....par	Do. Charlestown,...	1-2
Millington,.....do	Do. Leesburg,....	1-2
DISTRICT.	Wheeling Banks,...	2
Washington, } Banks, 1/2 p.c.	Ohio Banks, generally	5
Georgetown, }	New Jersey Bankgen.	3
Alexandria, }	New York City,.....par	
PENNSYLVANIA.	New York State,....	1/2 a 1
Philadelphia,.....par	Massachusetts,.....	2a 1/2
Chambersburg,.....	Connecticut,.....	do
Gettysburg,.....do	New Hampshire,....	do
Pittsburg,.....2	Maine,.....	do
York,.....1/2	Rhode Island,.....	do
Other Pennsylvania Bks., 1	North Carolina,....	2 1/2 a 3
Delaware [under \$5],.... 4	South Carolina,....	4a 5
Do. [over 5],.....1 1/2	Georgia,.....	5a 5 1/2
Michigan Banks,.....6	New Orleans,.....	7a 8
Canadian do.....10		

SEEDS, PLANTS, FLOWERS.



The subscriber offers for sale at his establishment a fresh supply of GARDEN SEEDS of the very best quality; those that cannot be grown in this country he imports direct from Europe from a source that can be relied on.

Besides a large collection of GREENHOUSE, hardy ORNAMENTAL TREES and Shrubs, Herbaceous Plants, and Bulbous Roots, and a choice collection of the very finest double Dahlias offered for sale, all on reasonable terms, wholesale or retail.

Also on hand a few bushels of ITALIAN RYE GRASS, with 100 bush. ITALIAN SPRING WHEAT, of the true kind. All orders for Fruit and Ornamental Trees, or any thing appertaining to his establishment will be strictly attended to, by

JOHN FEAST,
Florist & Seedsman, cor. of Lexington and Pine sts.
ja 22 tf Baltimore.

A YOUNG BULL.

For sale a fine young Bull of the DEVON and TEESWATER breed. He is rising twelve months old, well grown and handsomely marked with red and white. His dam is teeswater and a deep milker.

EDWARD P. ROBERTS.

april 2

ROBERTS' SILK MANUAL.

The Fourth edition of this popular work is now in a course of publication by the subscribers, and will be issued from the press about the 1st May, printed with new type on a good paper. It contains upwards of 100 large octavo pages, and embraces every information needed by the silk culturist from the planting and rearing of the mulberry to the making and dyeing of Sewings & Twists; the plan of constructing cocooneries, feeding shelves, the process of feeding the worms, ventilation of their apartments, apportionment of food, and in fine, every thing necessary to the acquisition of a silk culturist is lucidly treated. A large edition has been nearly disposed of since about the 1st January, and the present edition has been put to press to supply a large order (1500 copies) from the legislature of Pennsylvania for gratuitous distribution in that commonwealth, by the recommendation of the committee on agriculture, who gave it their decided approbation and recommendation over every other work published on the subject. The late Governor of Maryland also recommended it in a special message to the legislature, for distribution among the people, and it has received the commendations of the committee on Agriculture of the House of Rep. of the Congress of the U. S.—A large edition is now publishing, and all orders from a distance can be promptly filled. A large discount will be made to the trade. Price 37 1-2 cts. per single copy. Address E. P. ROBERTS & S. SANDS, Balti. Md.

Who are also publishers of the "Farmer & Gardener," a weekly journal devoted to Agriculture, &c. &c. the 6th vol. of which commences in May—\$2.50 per ann. Baltimore, Md. April 23, 1839.

The following named papers will please publish the above to the amount of \$2: Maine Farmer, Boston Atlas, New Hampshire Patriot, Connecticut Courant, Albany Cultivator, N. Y. Courier & Enquirer, New Brunswick Times, Phil. American Sentinel, U. S. Gazette, and Saturday Courier, Wilmington, Del. State Journal, Centreville Times, Fredericktown Herald, National Intelligencer, Richmond Enquirer, Raleigh Register, Charleston Mercury, Savannah Georgian, Natchez Courier, N. Orleans Bee, Mobile Mercantile Advertiser, Cincinnati Gazette, Louisville Journal, Nashville Banner, Detroit Journal, Indianapolis Farmer, and St. Clair (Ill.) Gazette.

FOR SALE,

A valuable FARM of prime soil, on the Western Run in Baltimore county, about two miles north west of the 14th mile stone of the Baltimore and York turnpike road, and at the same distance from the depot of the Baltimore and Susquehanna rail road, at Cockey's tavern, in a rich, highly cultivated and healthy tract of country.

This farm contains from 260 to 270 acres, having a full proportion in wood, much of which is building timber, peculiarly valuable in that neighborhood; is in the best state of cultivation; a considerable part in productive timothy meadow, and the residue of the arable land, not in grain, is well set in clover, the whole under good fencing, laid off into convenient fields, each of which is well watered. The farm has a large quarry of excellent building stone. There are on the premises an apple orchard of select fruit trees, which seldom fail to bear abundantly; a valuable mill seat on the Western Run, with a race already dug. There is no location in the country more favorable for a grist mill, having the advantage of a rich and thickly settled neighborhood, and a good public road leading thence to the turnpike road. Buildings substantial and convenient, being a STONE DWELLING, and kitchen of two stories; a large stone Switzer barn, with cedar roof and extensive stabling below; large hay house and stable for cattle; stone milk house near the dwelling, with a spring of fine never failing water, with other out-houses. On the country road near the mill-seat a good house and shop for a mechanic, under rent to a good tenant. It is well known the lands on the Western Run are in every respect equal, if not superior to any in the county. Adjoining or near are the lands of Col. N. Bosley, Daniel Bosley, Thos. Matthews and others. The water power, with about 20 acres of land, is so situated that they may be detached and sold separately, without injury to the rest of the farm for agricultural purposes. Terms of sale will be liberal. Apply to

NATHANIEL CHILDS,
on the premises, or to
WILLIAM J. WARD,

THE AMERICAN FARMER.

The proprietors of this paper have a few complete sets of this work on hand, which they will dispose of at the reduced price of \$50 a set.
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